2002 Annual Air Monitoring Technical Report

Palm Beach County Health Department
Division of Environmental Health and Engineering

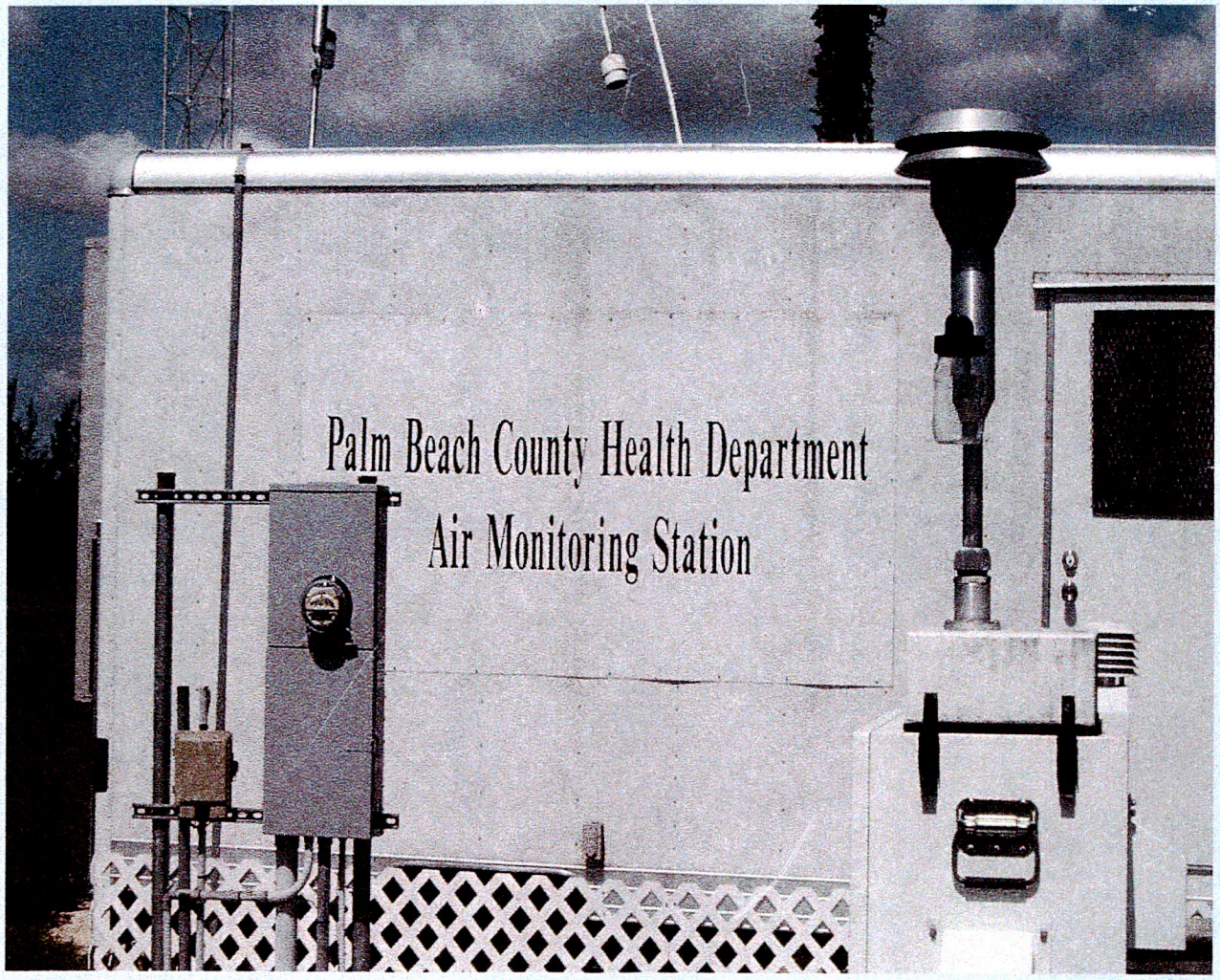


Photo of Shelter for Ozone and Continuous PM2.5 at Royal Palm Beach

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS

AIRS	Air Information Retrieval System
AQI	Air Quality Index
BAM	Beta Attenuation Monitor
BGHD	Belle Glade Health Department, Site #31
CFR	Code of Federal Regulation
CO	Carbon Monoxide
DAS	Data Acquisition System
DB	Delray Beach, Site #29
DBHD	Delray Beach Health Department, Site #27
DEP	Department of Environmental Protection (Florida)
EPA	Environmental Protection Agency (U.S.)
FDH	Florida Department of Health
GC	Gas Chromatograph
MDL	minimum detectable limit
N/A	Not Applicable
NAMS	National Air Monitoring Stations
NIST	National Institute of Standards and Technology (formerly NBS)
NO_2	Nitrogen Dioxide
O_3	Ozone
PBCHD	Palm Beach County Health Department
PBI	Palm Beach International, West Palm Beach, Site #25
$PM_{2.5}$	Particulate Matter with an aerodynamic diameter $\leq$ 2.5 microns
PM_{10}	Particulate Matter with an aerodynamic diameter $\leq$ 10 microns
ppb	parts per billion
ppm	parts per million
PUF	High Volume Polyurethane Foam sampler
QA	Quality Assurance
RBWH	Warehouse, Riviera Beach, Site #28
RPB	Royal Palm Beach, Site #35
SAROAD	Storage and Retrieval of Aerometric Data
SLAMS	State and Local Air Monitoring Stations
SOP	Standard Operating Procedures
SO_2	Sulfur Dioxide
S.P.	Special Purpose
SUMX	Brand of Data Acquisition System
TSP	Total Suspended Particulates
UTM	Universal Transverse Mercator

INTRODUCTION

This report provides technical information about the ambient air monitoring program in Palm Beach County. Current methodologies, siting, precision and accuracy, audits, and comparison of data to ambient air quality standards are addressed.

The Division of Environmental Health and Engineering, FDOH Palm Beach County Health Department has monitored ambient air pollution for Palm Beach County since 1966. During 2002, monitoring, data verification and handling, and quality assurance procedures were performed by Daniel Brunet, Robert Moskovitz, Sandy Nicoll, Don Smith, and Ken Wilson.
For additional information, please call the Quality Assurance Section at (561) 355-3070.

CURRENT METHODOLOGY

Carbon Monoxide (CO)
This pollutant is monitored continuously at PBCHD site 25 using a Monitor Labs, Model 9830 analyzer (gas correlation infrared). This analyzer is calibrated using certified NIST traceable gases which are diluted using Teco, Model 146 dilution systems.

Nitrogen Dioxide (NO_2)
This pollutant is monitored continuously at PBCHD site 25 using a Monitor Labs, Model 9841A, gas-phase chemiluminescence analyzer. This analyzer is calibrated using a certified NIST traceable gas which is diluted using a Teco, Model 146 dilution system.

Ozone (O_3)
This pollutant is monitored continuously at PBCHD site 29 using Monitor Labs, Model 9812 UV Photometer analyzer and at site 35 using Teco Model 49C. These analyzers are calibrated using a Monitor Labs, Model 9811 as the primary standard.

Sulfur Dioxide (SO_2)
This pollutant is monitored continuously at PBCHD site 28 using a Monitor Labs, Model 9850 Fluorescent monitor. This analyzer is calibrated using a certified NIST traceable gas which is diluted using a Teco, Model 146 dilution system.

Particulate Matter (PM_{10})
The PM_{10} standard is based on the respirable fraction of particulate matter which is considered to be less than 10 microns (10×10^{-6} meters) aerodynamic diameter. PM_{10} was monitored at PBCHD sites 27 and 31 on a six day schedule using Andersen Model 1200 collectors. Calibration checks of flow are performed using an orifice calibrated by EPA. Collocated PBCHD site 31 is used to calculate precision.

Particulate Matter ($PM_{2.5}$)

The $PM_{2.5}$ standard is based on the respirable fraction of particulate matter less than 2.5 microns aerodynamic diameter.

$PM_{2.5}$ was monitored daily at PBCHD sites 27, 31, and 35 using Rupprecht & Patashnick Model 2025 collectors. Collocated PBCHD site 27 is used to calculate precision.

In addition, $PM_{2.5}$ is monitored continuously at PBCHD site 25 using a Andersen Beta Attenuation Monitor (BAM). Data from PBI, site 25, is used to calculate the Air Quality Index (AQI).

Wind Speed and Wind Direction
Wind Speed and Wind Direction are monitored continuously at PBCHD sites 25, 29, and 35 using Handar AR, Model A425 Series monitoring systems.

SPECIAL STUDIES

Air Toxics Monitoring

Sampling every 12 days for these pollutants was conducted at the Delray Beach Health Department, 225 South Congress Avenue, Delray Beach in November and December of 2002 using Summa canisters. Time integrated samples were analyzed by gas chromatographic analysis and mass spectroscopy (TO-15) by Broward County Department of Planning and Environmental Protection.

Summary of Volatile Organic Compounds Sampling

No	COMPOUND NAME	# [1]	% OCCURR	ppbv MDL	ppbv Min.	ppbv Max.	ppbv ARITHMETIC AVERAGE
	ACRYLONITRILE	2	50%	0.109	0.27	0.38	0.33
1	1,1-DICHLOROETHANE	0	0.00%	0.0585			
2	1,1-DICHLOROETHYLENE	0	0.00%	0.0573			
3	**1,1,1-TRICHLOROETHANE**	3	60.00%	0.0573	0.07	0.17	0.12
4	1,1,2-TRICHLOROETHANE	0	0.00%	0.0643			
5	1,1,2,2-TETRCHLOROETHANE	0	0.00%	0.0804			
6	1,3-BUTADIENE	2	40.00%	0.069	0.13	0.16	0.15
7	1,2-DICHLOROBENZENE	0	0.00%	0.141			
8	1,2-DICHLOROETHANE	0	0.00%	0.0602			
9	1,2-DICHLOROPROPANE	0	0.00%	0.249			
10	1,2,4-TRICHLOROBENZENE	1	20.00%	0.249		0.32	
11	**1,2,4-TRIMETHYLBENZENE**	3	75.00%	0.0864	0.13	0.65	0.36
12	1,3-DICHLOROBENZENE	0	0.00%	0.119			
13	**1,3,5-TRIMETHYLBENZENE**	1	25.00%	0.088		0.15	0.15
14	**1,4-DICHLOROBENZENE**	2	40.00%	0.081	0.17	0.18	0.18
15	**BENZENE**	5	100.00%	0.0832	0.2	0.4	0.32
16	**BROM0METHANE**	1	20.00%	0.0723		0.25	
17	**CARBON TET.**	3	60.00%	0.0573	0.09	0.12	0.10
18	CHLOROBENZENE	0	0.00%	0.0669			
19	CHLOROETHANE	0	0.00%	0.0585			
20	**CHLOROFORM**	2	40.00%	0.0483	0.07	0.11	0.09
21	**CHLOROMETHANE**	3	60.00%	0.13	1.34	1.39	1.22
22	c-1,2-DICHLOROETHENE	0	0.00%	0.0642			
23	c-1,3-DICHLOROPROPENE	0	0.00%	0.0523			
24	**DICHLORODIFLUOROMETHANE**	5	100.00%	0.068	0.57	0.75	0.66
25	**ETHYLBENZENE**	3	60.00%	0.0648	0.15	0.24	0.20
26	**FREON 11**	5	100.00%	0.069	0.35	0.9	0.49
27	**FREON 113**	5	100.00%	0.0523	0.07	0.13	0.11
28	FREON 114	1	20.00%	0.0558		0.56	
29	**HEXACHLORO-1,3-BUTADIENE**	2	40.00%	0.088	0.24	0.26	0.25
30	**m,p-XYLENE**	4	80.00%	0.159	0.27	0.65	0.45
31	**METHYLENE CHLORIDE**	4	80.00%	0.161	0.23	0.57	0.45
32	**o-XYLENE**	4	80.00%	0.0669	0.1	0.27	0.20
33	**STYRENE**	2	40.00%	0.0669	0.1	0.75	0.43
34	**TETRACHLOROETHENE**	2	40.00%	0.0708	0.23	0.25	0.24
35	**TOLUENE**	5	100.00%	0.0584	0.53	3.12	1.61
36	t-1,3-DICHLOROPROPENE	0	0.00%	0.0739			
37	TRICHLOROETHENE	2	40.00%	0.0573	0.09	0.12	0.11
38	VINYL CHLORIDE	0	0.00%	0.0684			

1. # samples exceeding MDL

year: 2002
site: 225 S. Congress Ave., Delray Beach, Florida
Method: TO-15
Units: ppbv

CURRENT MONITORING NETWORK DESCRIPTION

The ambient air monitoring program in Palm Beach County at the end of 2001 consisted of two manual PM_{10} sites, three $PM_{2.5}$ sites, two O_3 sites, one NO_2 site, one CO site, one SO_2 site, two meteorology sites, and one continuous $PM_{2.5}$ site. (See Figure 1 which shows the location of the monitoring sites.) Data from continuous monitors at PBCHD sites 25, 28, 29, and 35 are stored on data loggers and transmitted by modem to the central data acquisition computer located at 901 Evernia Street, West Palm Beach, Florida.

PBCHD #: 25 (PBI)
AIRS #: 120991004
ADDRESS: 3700 Belvedere Road, West Palm Beach, FL
MONITORING: continuous CO NETWORK: NAMS MONITOR OBJ: High Concentration
SPATIAL SCALE : Middle
MONITORING: continuous NO_2 NETWORK: SLAMS MONITOR OBJ: High Concentration
SPATIAL SCALE: Neighborhood
MONITORING: continuous $PM_{2.5}$ NETWORK: S. P. MONITOR OBJ: Air Quality Index
SPATIAL SCALE: Middle

PBCHD #: 27 (DBHD)
AIRS #: 120992005
ADDRESS: 225 S. Congress Ave., Delray Beach, FL
MONITORING: PM_{10} (6 day) NETWORK: SLAMS MONITOR OBJ: Population Exposure
pollen NETWORK: Special Purpose
SPATIAL SCALE: Neighborhood
MONITORING: $PM_{2.5}$ (daily)(dup) NETWORK: SLAMS MONITOR OBJ: High Concentration
SPATIAL SCALE: Neighborhood

PBCHD #: 28 (RBWH)
AIRS #: 120993004
ADDRESS: 1050 15th Street West, Riviera Beach, FL
MONITORING: continuous SO_2 NETWORK:SLAMS MONITOR OBJ: High Concentration
SPATIAL SCALE: Neighborhood

PBCHD #: 29 (DB)
AIRS #: 120992004
ADDRESS: 210 NW 1st Ave., Delray Beach, FL
MONITORING: continuous O_3 NETWORK: NAMS MONITOR OBJ: High Concentration
Meteorology
SPATIAL SCALE: Urban

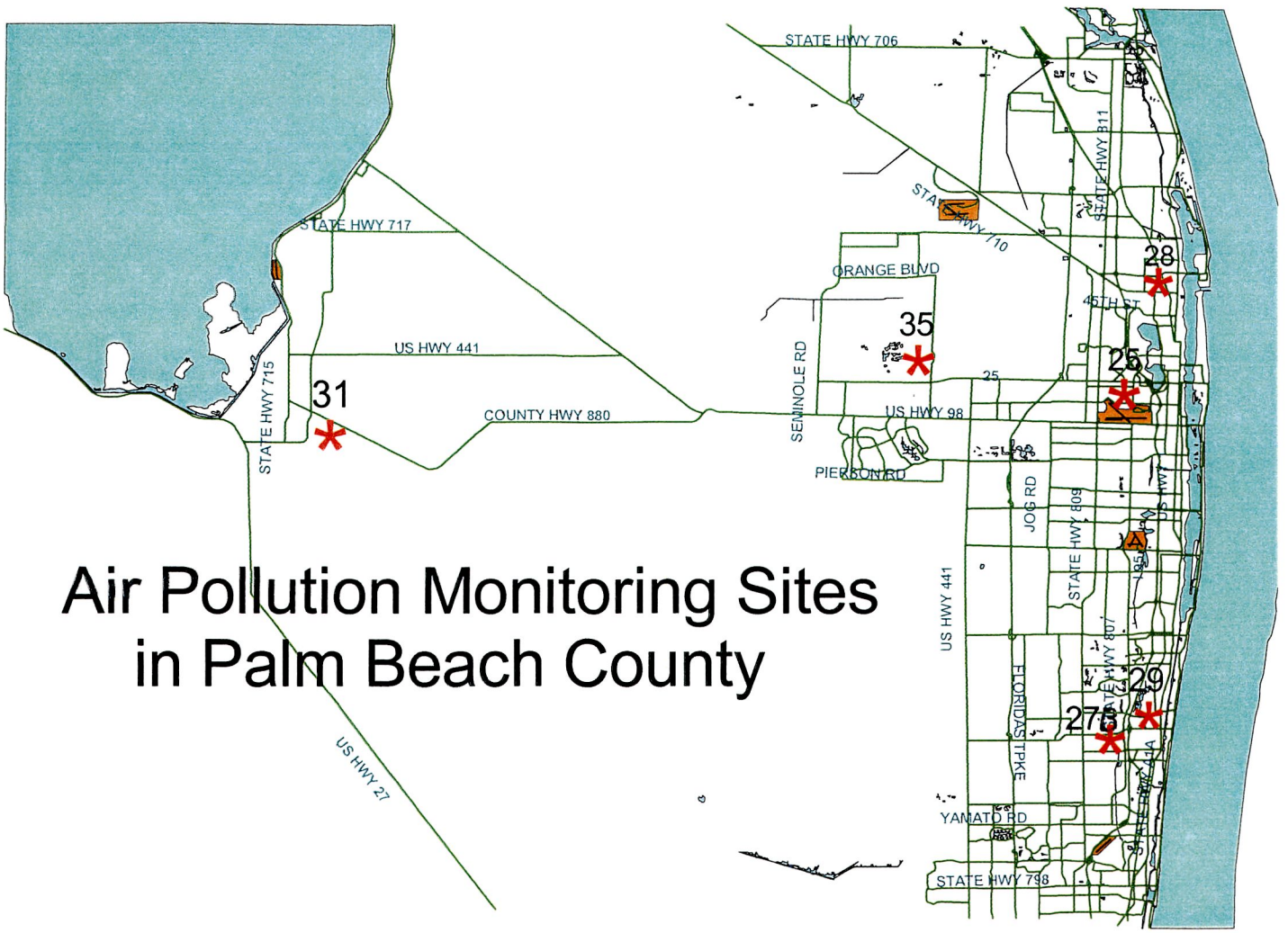
PBCHD #: 31 (BGHD)
AIRS #: 120990008
ADDRESS: 38745 SR 80, Belle Glade, FL
MONITORING: PM_{10} (6 day)(dup) NETWORK: Special Purpose MONITOR OBJ: Source
SPATIAL SCALE: Neighborhood
MONITORING: $PM_{2.5}$ (6 day) NETWORK: Special Purpose MONITOR OBJ: Source
SPATIAL SCALE: Neighborhood

PBCHD #: 35 (RPB)
AIRS #: 120990009
ADDRESS: 980 Crestwood Blvd. N., Royal Palm Beach, FL
MONITORING: continuous O_3 NETWORK: NAMS MONITOR OBJ: Population Exposure, Air Quality Index
Meteorology
SPATIAL SCALE: Neighborhood

MONITORING: $PM_{2.5}$ (daily) NETWORK: SLAMS MONITOR OBJ: Population Exposure
SPATIAL SCALE: Neighborhood

Significant Events in 2002

April – RPB trailer vandalized, computer stolen. destroyed
July – PBI trailer struck by lightning. All analyzers and data loggers fried. Rewired after one week.
August – NO2 at PBI down for cooler failure. Reactivated in November.
November – carbonyl monitors activated at BGHD and DBHD. TO-15 VOC monitoring commenced at DBHD.



Air Pollution Monitoring Sites in Palm Beach County

2002 PRECISION, ACCURACY and COMPLETENESS

Carbon Monoxide (CO)	Conc Range	Accuracy Range	EPA Goal
	3 - 8 ppm	13 to -3 %	+/- 20%
	15 - 20 ppm	9 to 4 %	+/- 20%
	40 - 45 ppm	8 to 6 %	+/- 20%
		Precision Range	
		13 to -3 %	+/-15%
		Completeness	
		95 %	75%

Nitrogen Dioxide (NO_2)	Conc Range	Accuracy Range	EPA Goal
	.03 - .08 ppm	7 to -6	+/- 20%
	.15 - .20 ppm	5 to -1	+/- 20%
	.35 - .45 ppm	6 to -3	+/- 20%
		Precision Range	
		0 to -9	+/-15%
		Completeness	
		68 %	75%

Ozone (O_3)	Conc Range	Accuracy Range	EPA Goal
	.03 - .08 ppm	2 to -9	+/- 20%
	.15 - .20 ppm	1 to -10	+/- 20%
	.35 - .45 ppm	-3 to -6	+/- 20%
		Precision Range	
		5 to -2	+/-15%
		Completeness	
		96 %	75%

Sulfur Dioxide (SO_2)	Conc Range	Accuracy Range	EPA Goal
	.03 - .08 ppm	3 to -1	+/- 20%
	.15 - .20 ppm	3 to -4	+/- 20%
	.35 - .45 ppm	5 to -6	+/- 20%
		Precision Range	
		1 to -6	+/-15%
		Completeness	
		99 %	75%

Particulate Matter	Flow Range	Accuracy Range	EPA Goal
(PM_{10})manual	1.21-1.05 m^3/min	3 to 1	+/-15%
		Precision Range	
		12 to -13	+/-15%
		Completeness	
		99 %	75%

Note: NO2 analyzer down from lightning strike, replacement analyzer down from cooler failure.

AMBIENT AIR QUALITY STANDARDS

POLLUTANT	FEDERAL PRIMARY	FEDERAL SECONDARY	STATE
PM_{10}[1]			
annual arithmetic mean	50 ug/m^3	Same as Federal Primary	Same as Federal Primary
max 24 hour concentration	150 ug/m^3		
$PM_{2.5}$[2]			
annual arithmetic mean	15 ug/m^3	Same as Federal Primary	Same as Federal Primary
max 24 hour concentration	65 ug/m^3		
Sulfur Oxides			
annual arithmetic mean	80 ug/m^3 (0.03 ppm)		60 ug/m^3 (0.02 ppm)
max 24 hour concentration	365 ug/m^3 (0.14 ppm		260 ug/m^3 (0.1 ppm)
max 3 hour concentration[3]		1,300 ug/m^3 (0.5 ppm)	Same as Federal Secondary
Carbon Monoxide			
max 8 hour concentration[3]	10 mg/m^3 (9 ppm)	Same as Federal Primary	Same as Federal Primary
max 1 hour concentration	40 mg/m^3 (35 ppm)		
Ozone			
daily max 1 hour conc.[4]	235 ug/m^3 (0.12 ppm)	Same as Federal Primary	Same as Federal Primary
daily max 8 hour conc.[5]	157 ug/m^3 (0.08 ppm)		
Nitrogen Oxides			
annual arithmetic mean	100 ug/m^3 (0.053 ppm)	Same as Federal Primary	Same as Federal Primary
Lead			
quarterly arithmetic mean	1.5 ug/m^3	Same as Federal Primary	Same as Federal Primary

1 PM_{10} is particulate matter with an aerodynamic diameter less than or equal to 10 micrometers.

2 $PM_{2.5}$ is particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers.

3 Concentration limits not to be exceeded more than once per year.

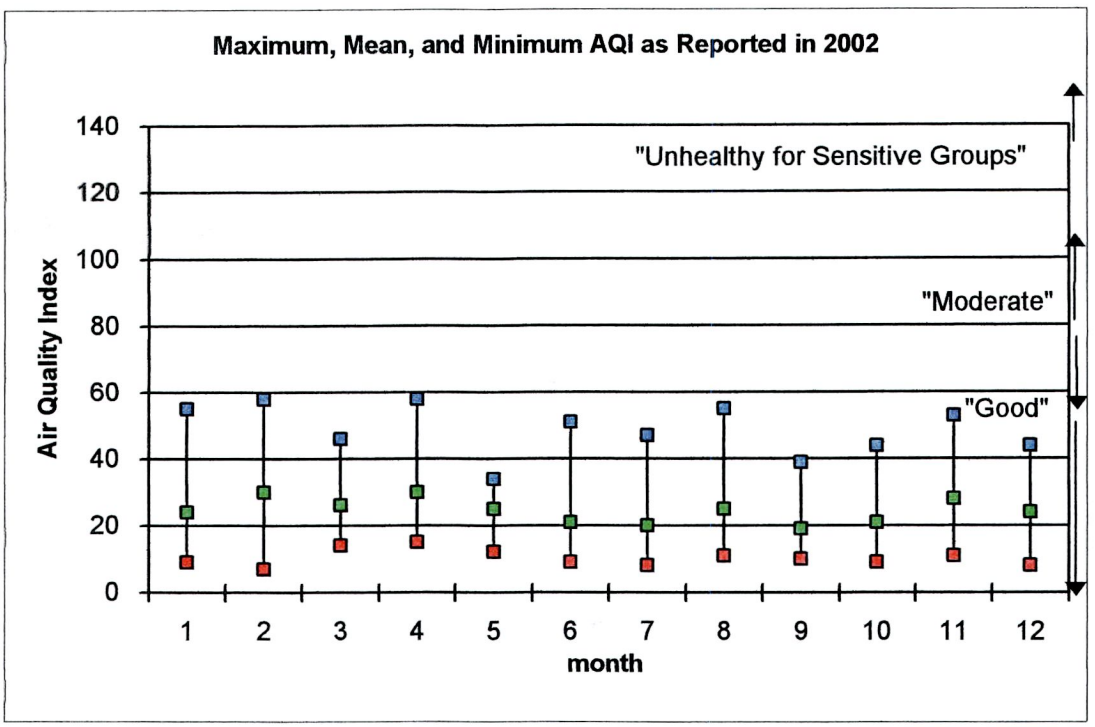
4 The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12ppm is equal to or less than 1.

5 The standard is attained when the 3-year average of the annual 4th highest daily maximum is less than or equal to 0.08 ppm.

Air Quality Index

Palm Beach County reports an air quality index to the general public on a daily basis as required by the Code of Federal Regulations, 40 CFR, Part 58.40 Subpart E - "Air Quality Index Reporting" and in accordance with the requirements of Appendix G.

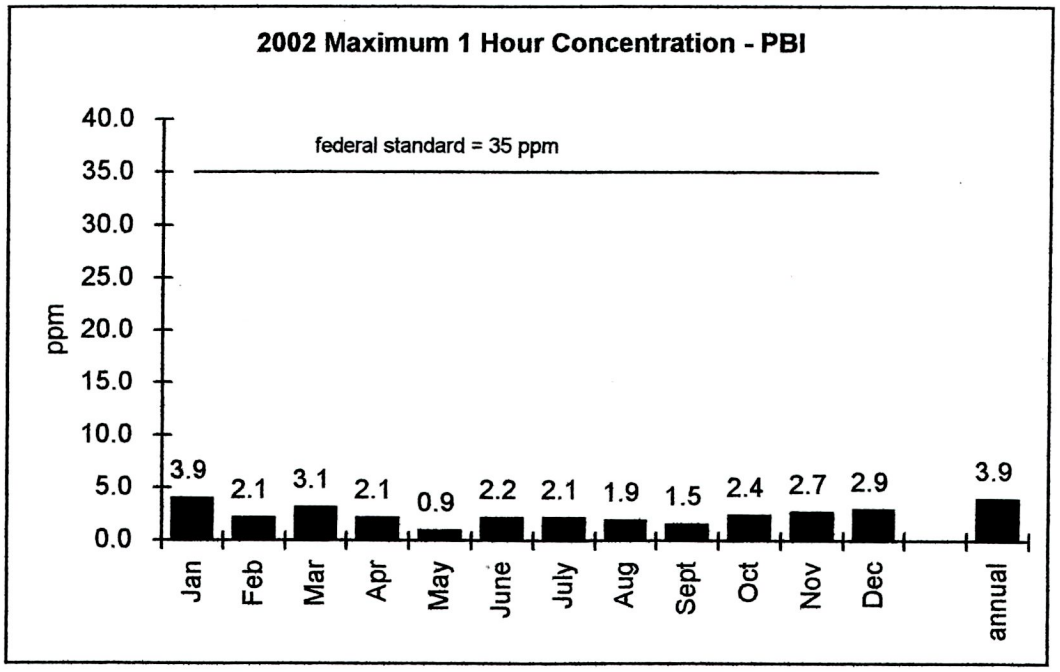
The Ozone monitors used to calculate the Air Quality Index (AQI) are located at Royal Palm Beach, Site 21 and Delray Beach, Site 29. An Andersen Beta Attenuation Monitor at Palm Beach International, Site 25 is used to measure $PM_{2.5}$ continuously for the AQI. NO_2, CO, and SO_2 monitor values are also available for calculating the AQI. However, these latter pollutants were not critical pollutants during 2002.

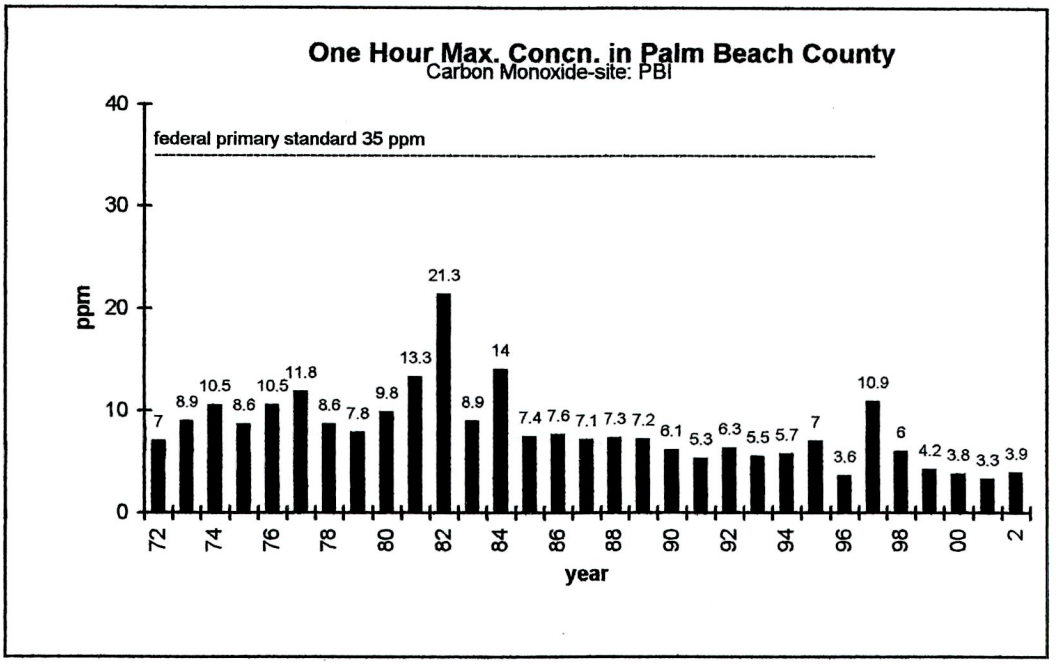


Air Quality Index Range and Descriptor Category

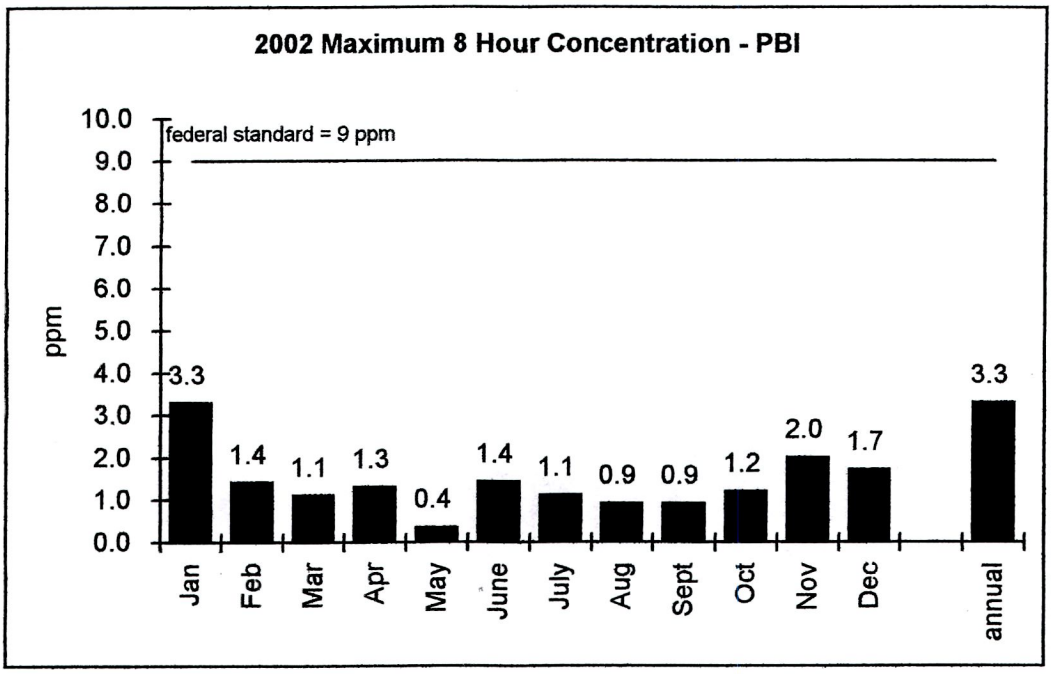
0 to 50 ..... "Good"
51 to 100 ..... "Moderate"
101 to 150 ..... "Unhealthy for Sensitive Groups"
151 to 200 ..... "Generally Unhealthy"
201 to 300 ..... "Very Unhealthy"
Over 300..... "Hazardous"

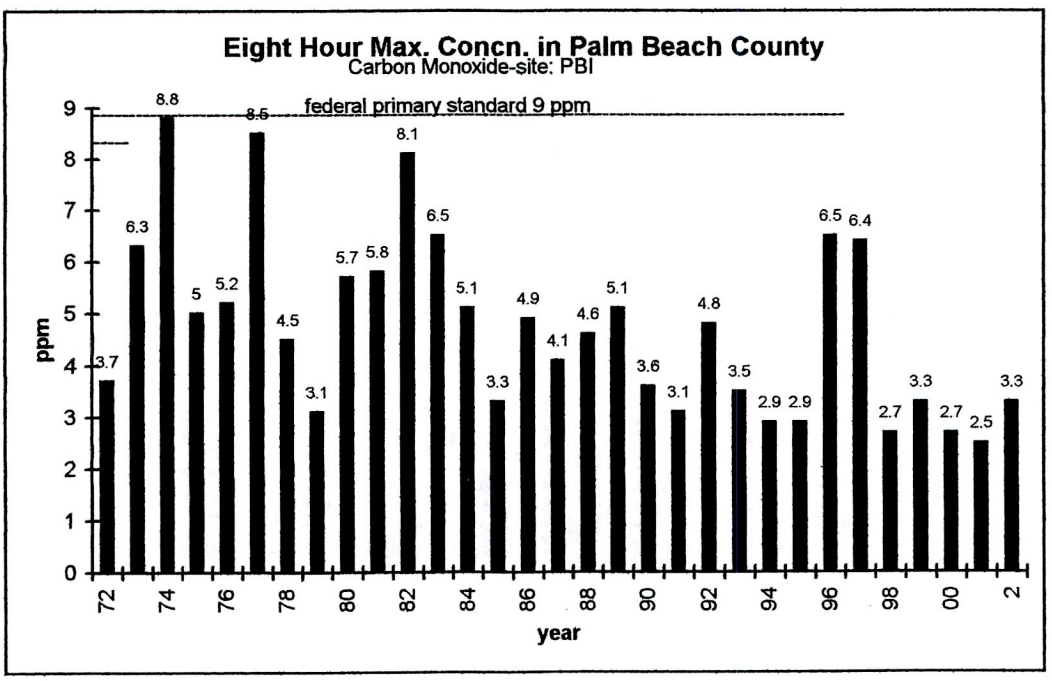
Carbon Monoxide (CO) Data



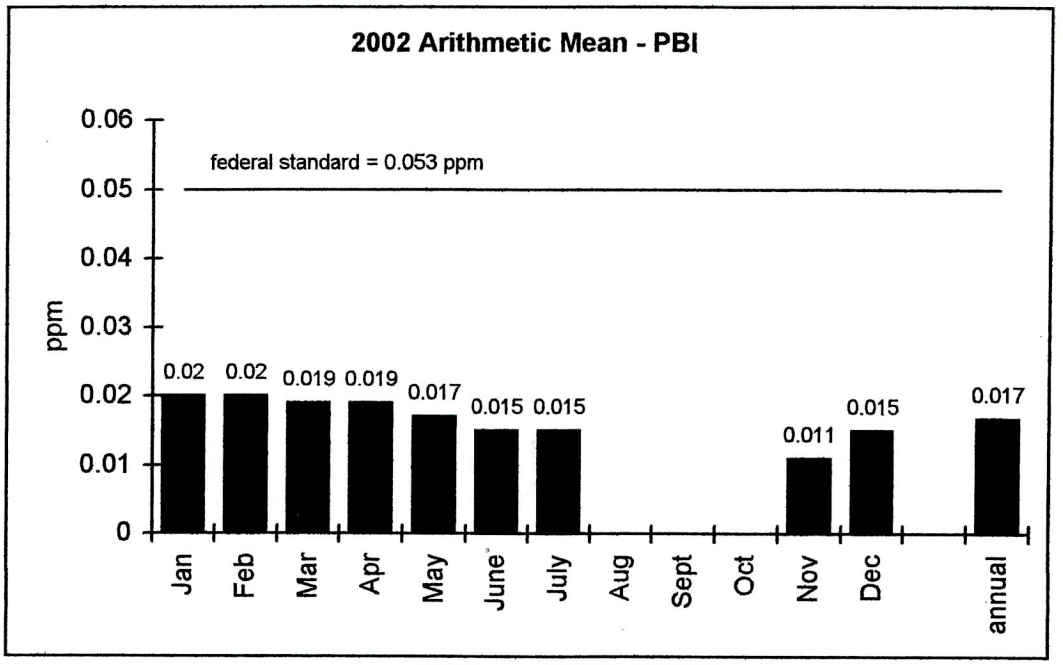


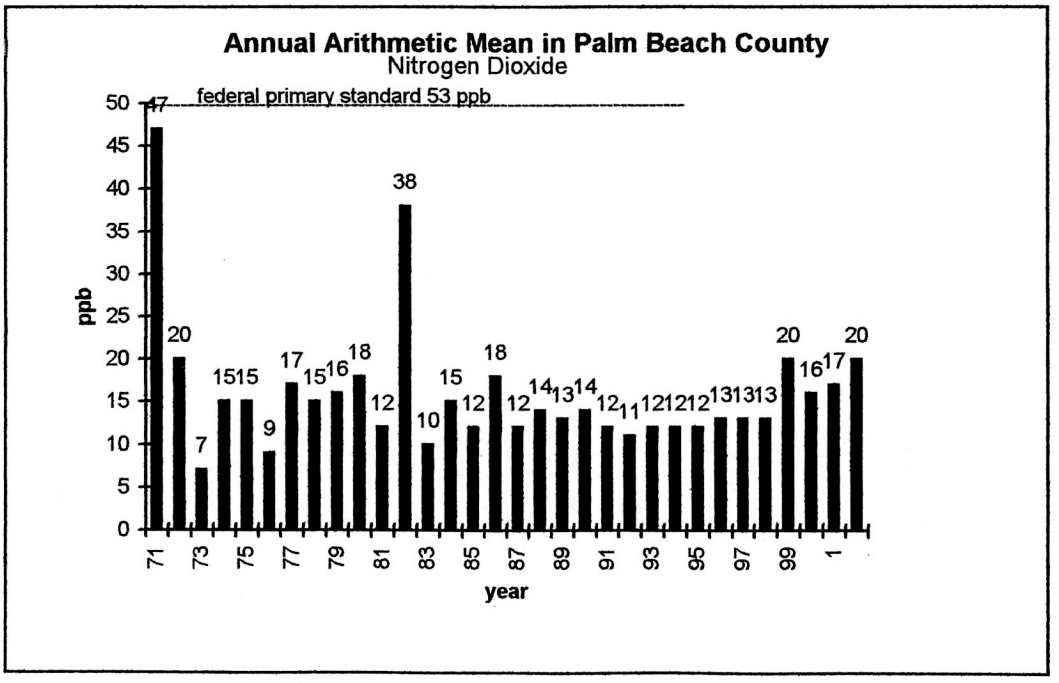
Carbon Monoxide (CO) Data



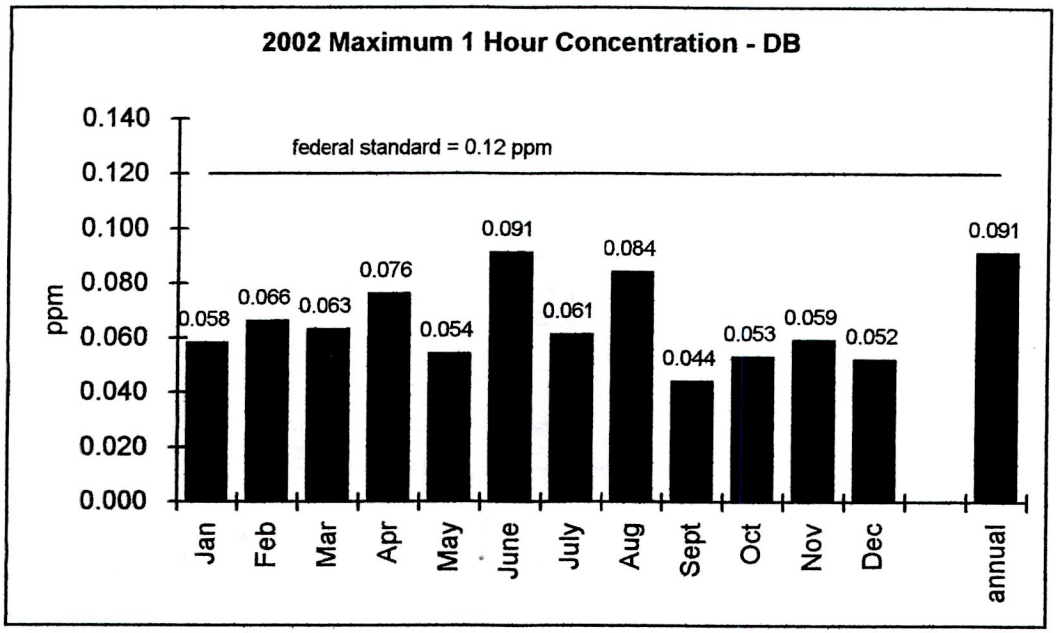


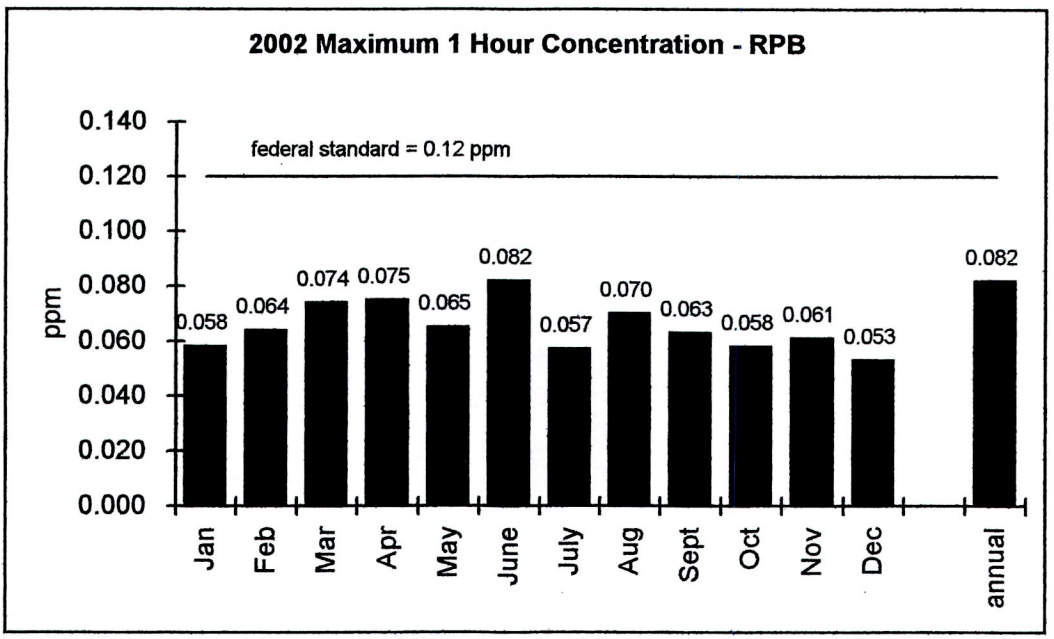
Nitrogen Dioxide (NO_2) Data



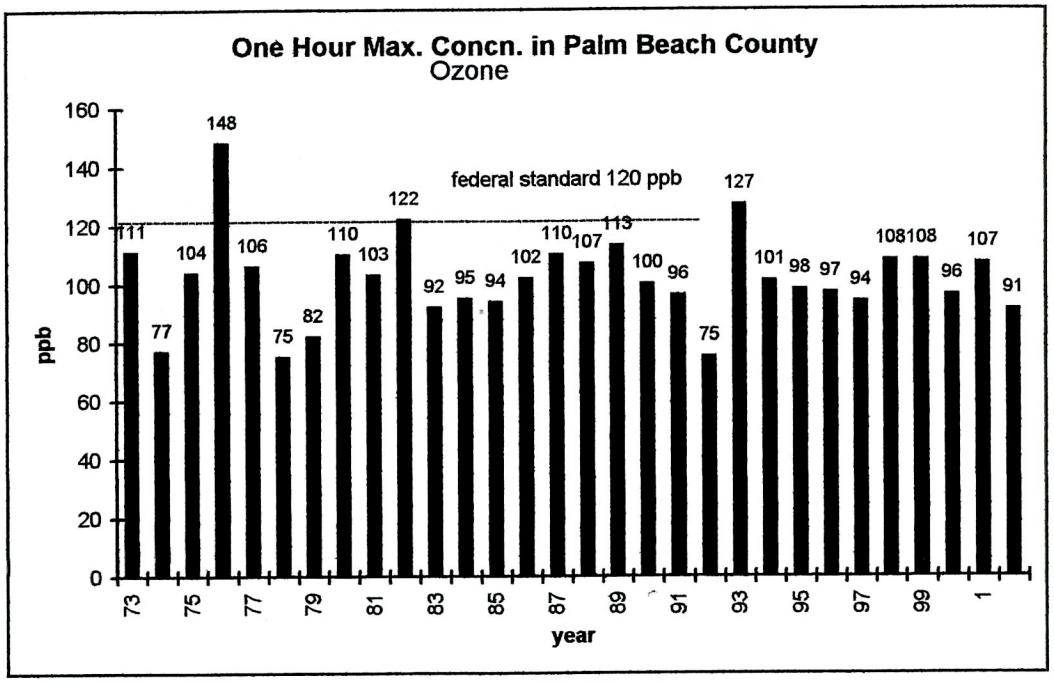


Ozone (O_3) Data

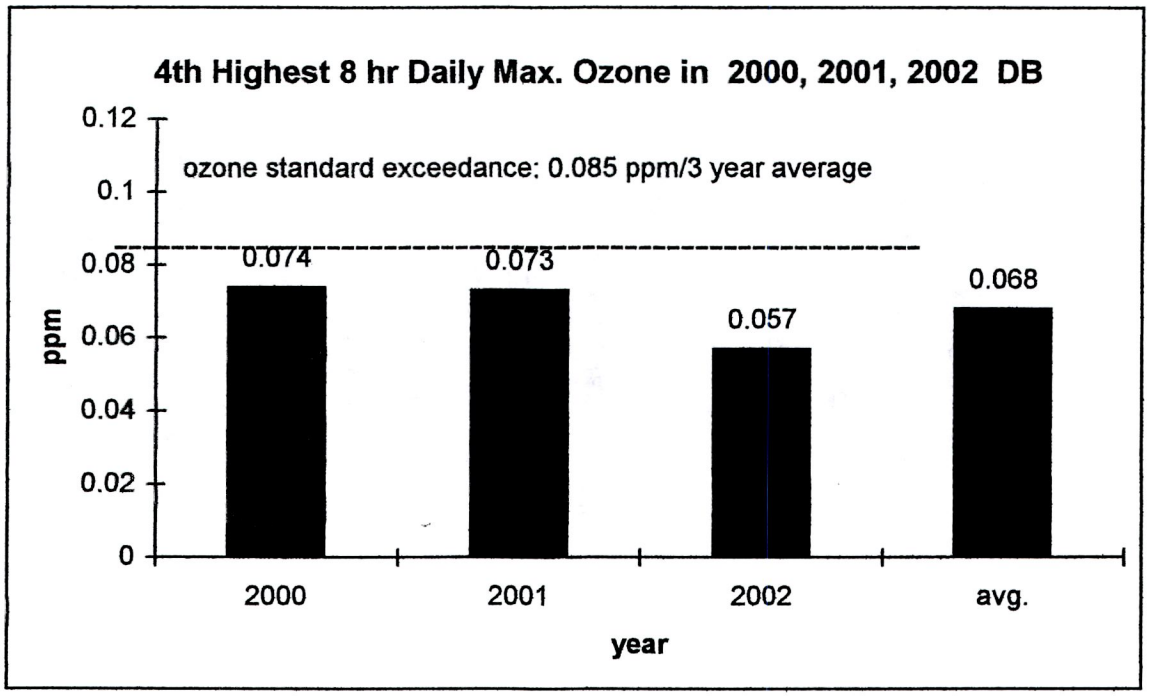


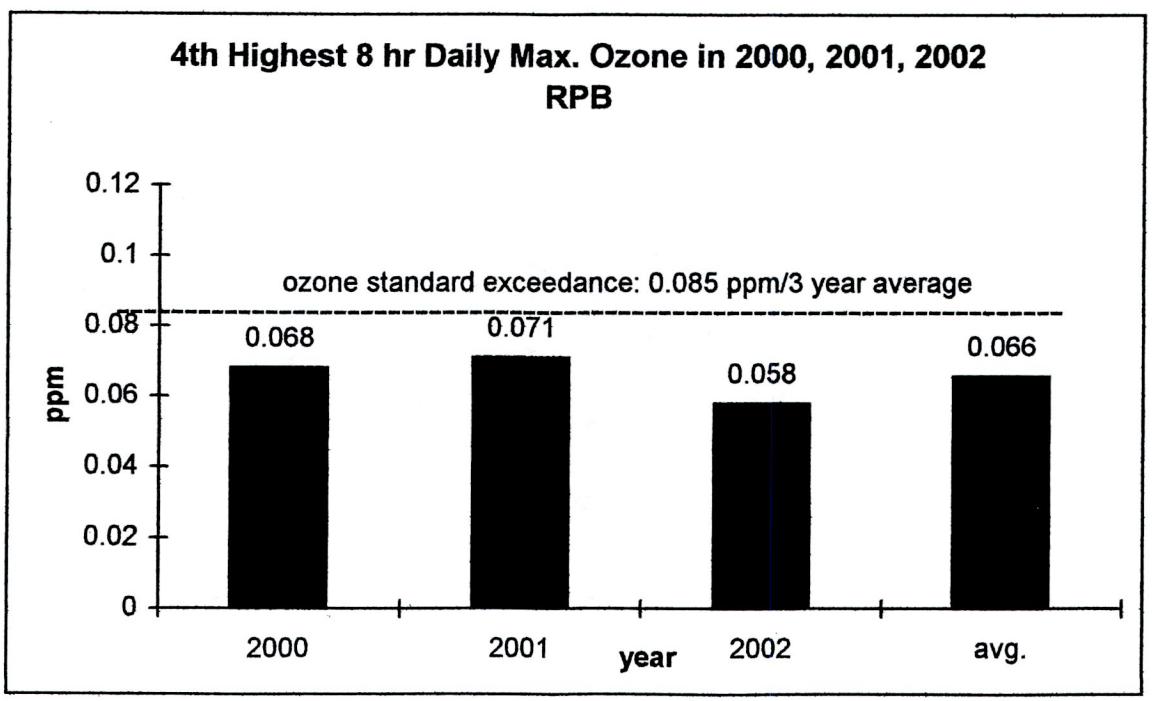


Ozone (O_3) Data

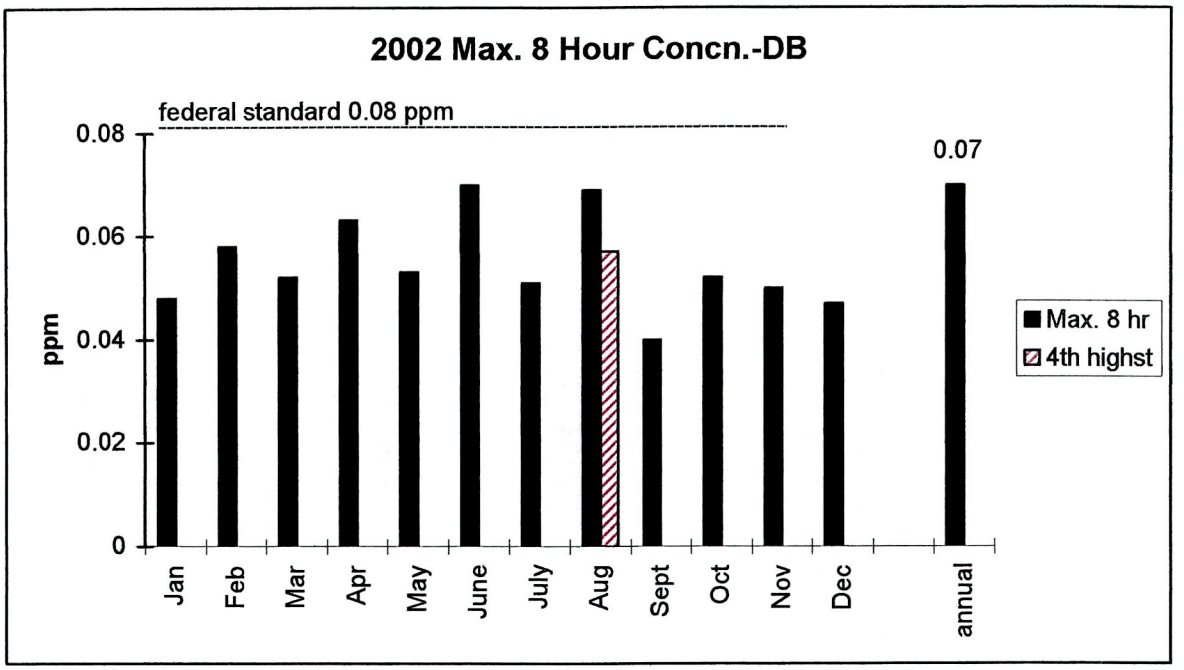


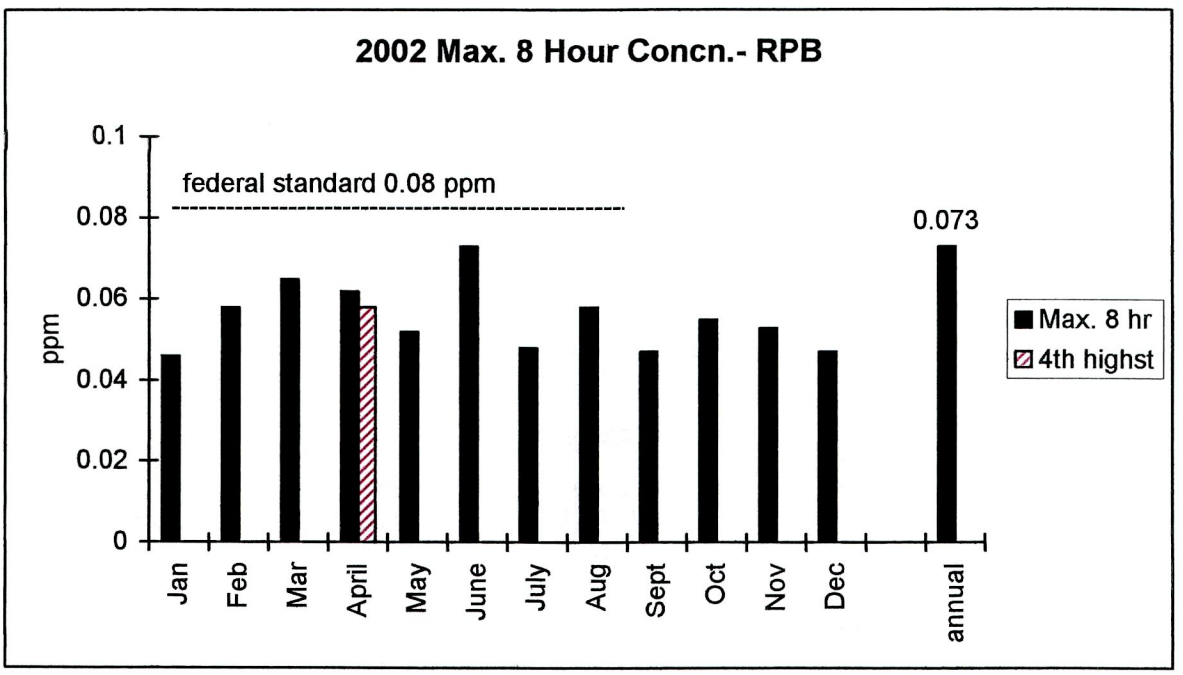
Ozone (O_3) Data



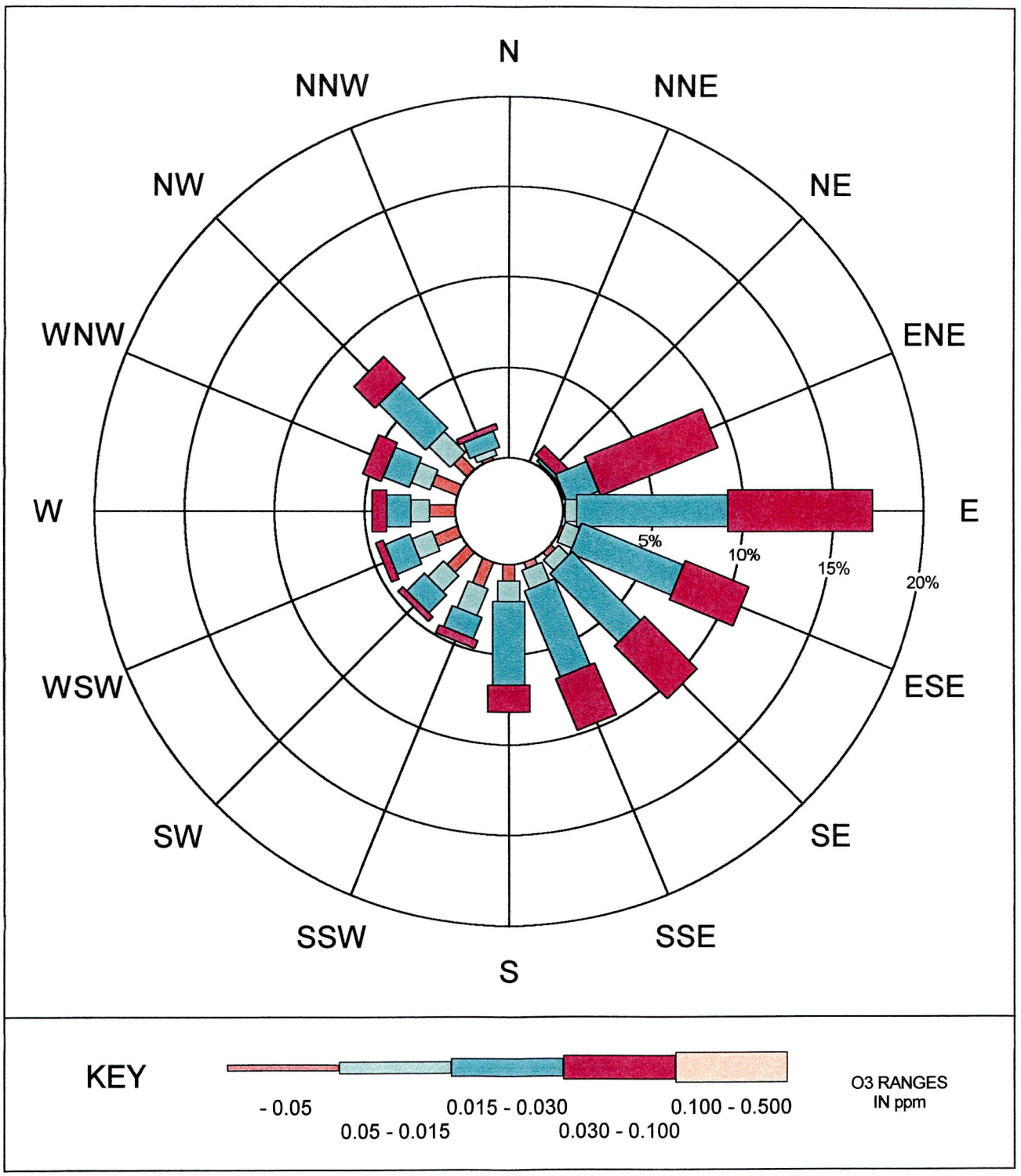


Ozone (O_3) Data

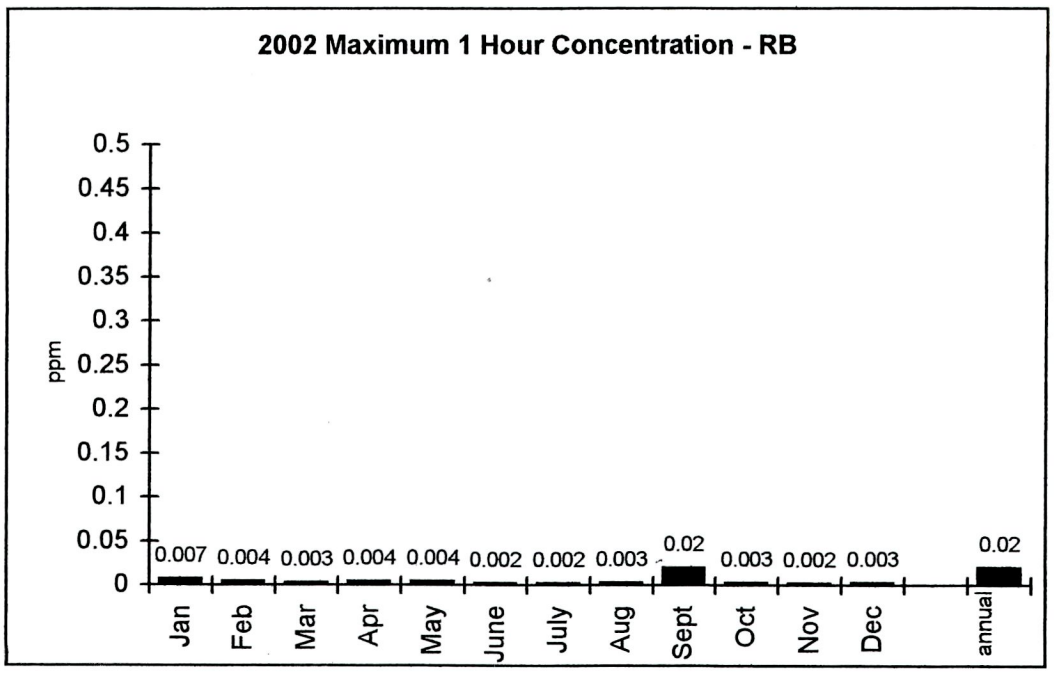




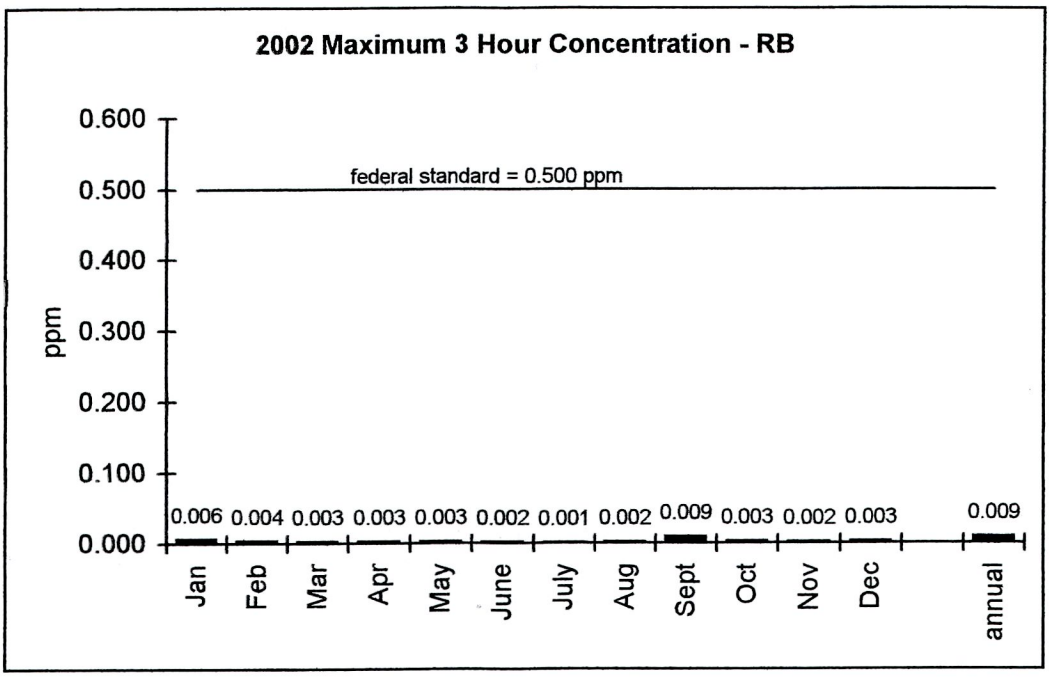
01 Jan 02 - 31 Dec 02
Station: DBO3
O3 versus WDR
Frequency of Occurrence (%)

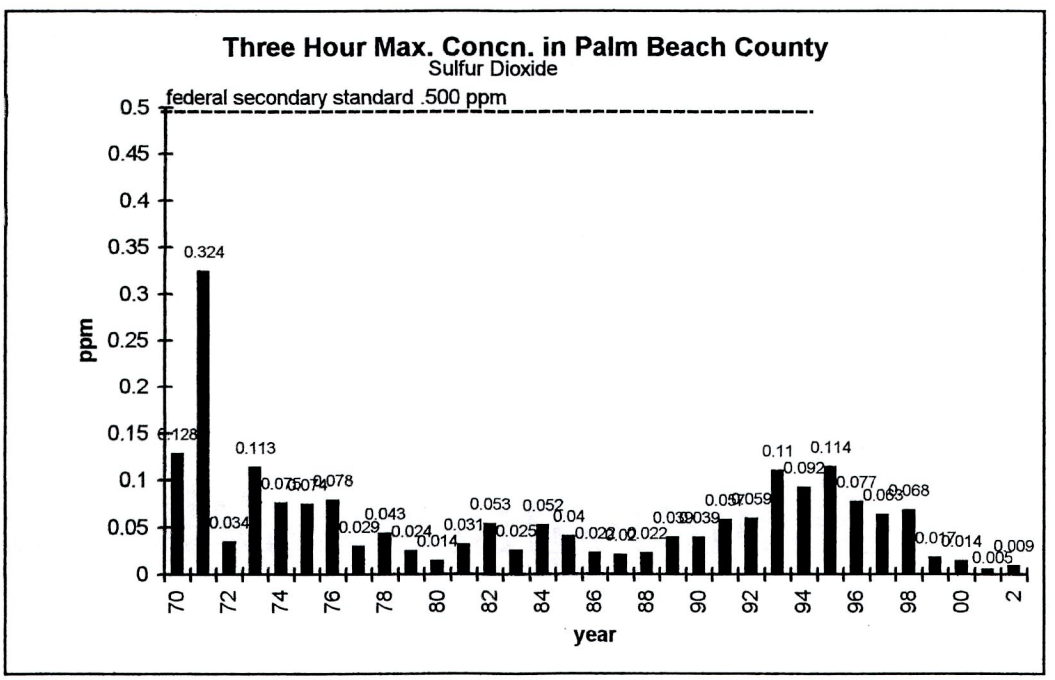


Sulfur Dioxide (SO_2) Data

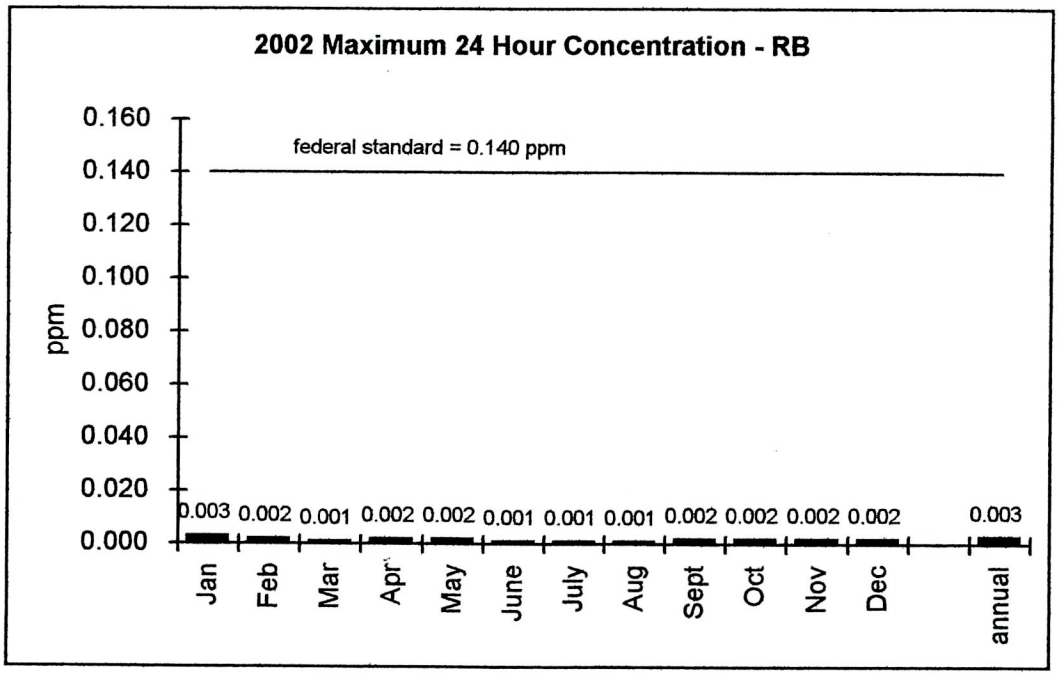


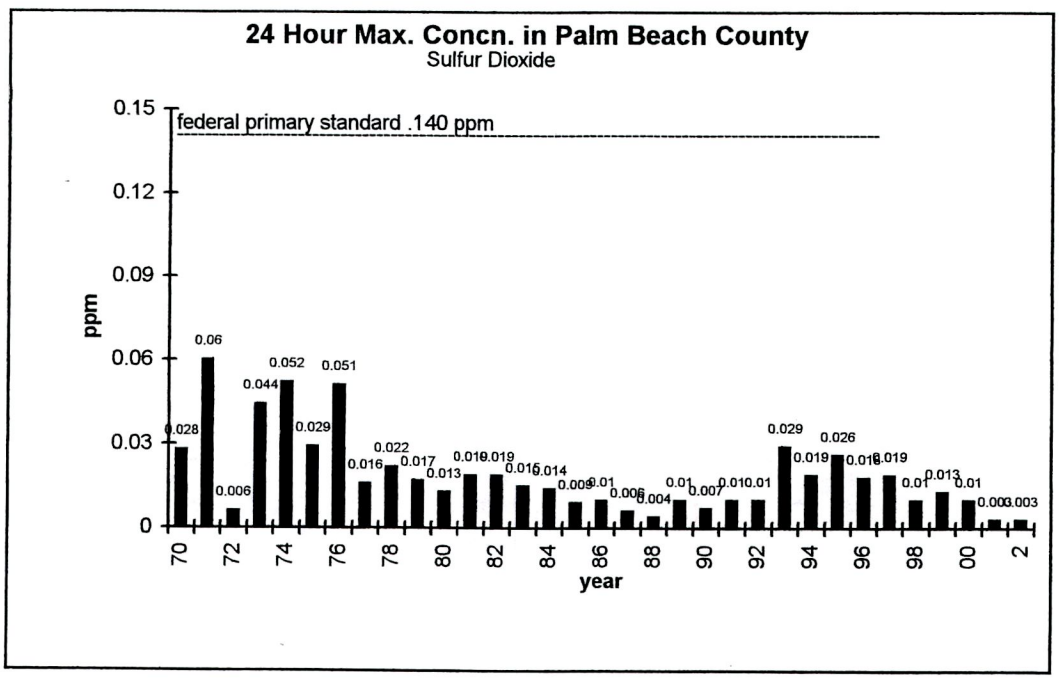
Sulfur Dioxide (SO_2) Data



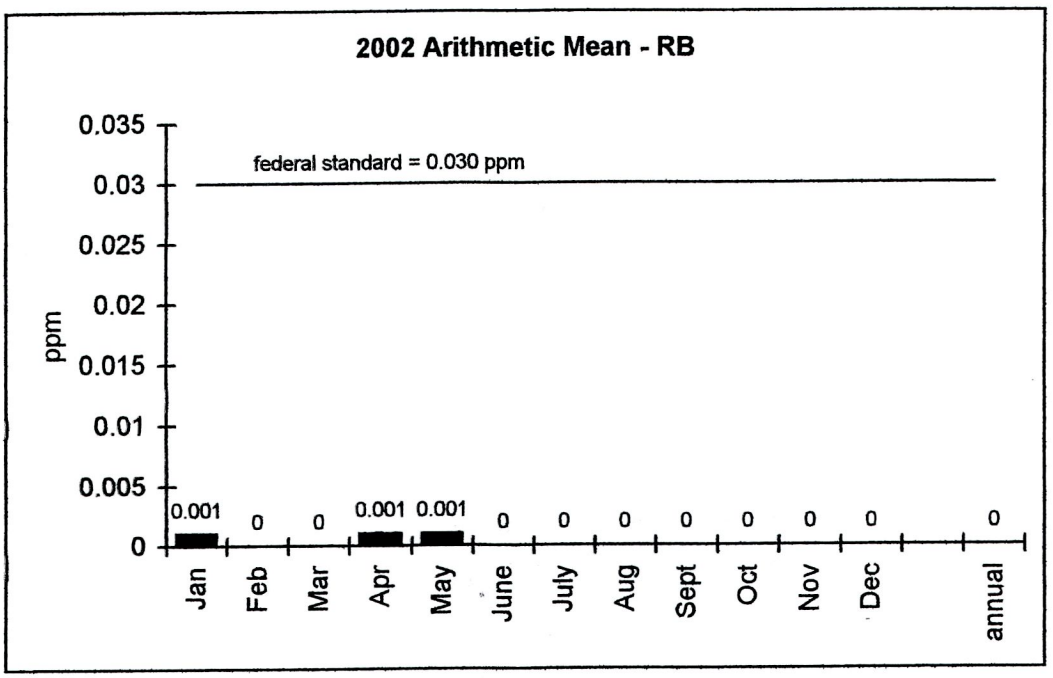


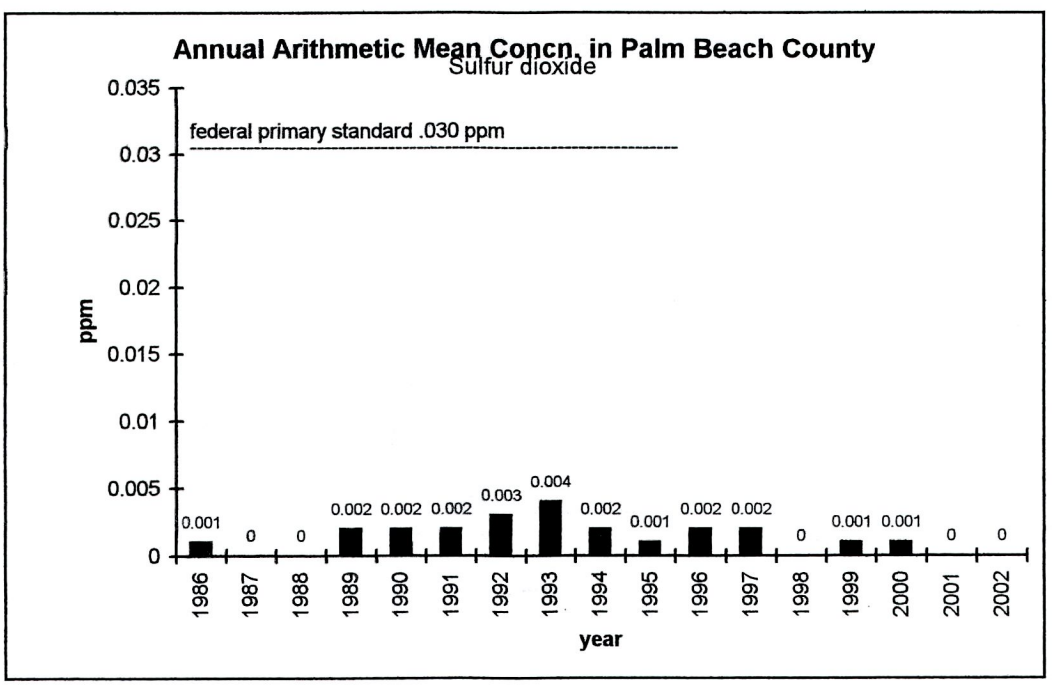
Sulfur Dioxide (SO_2) Data



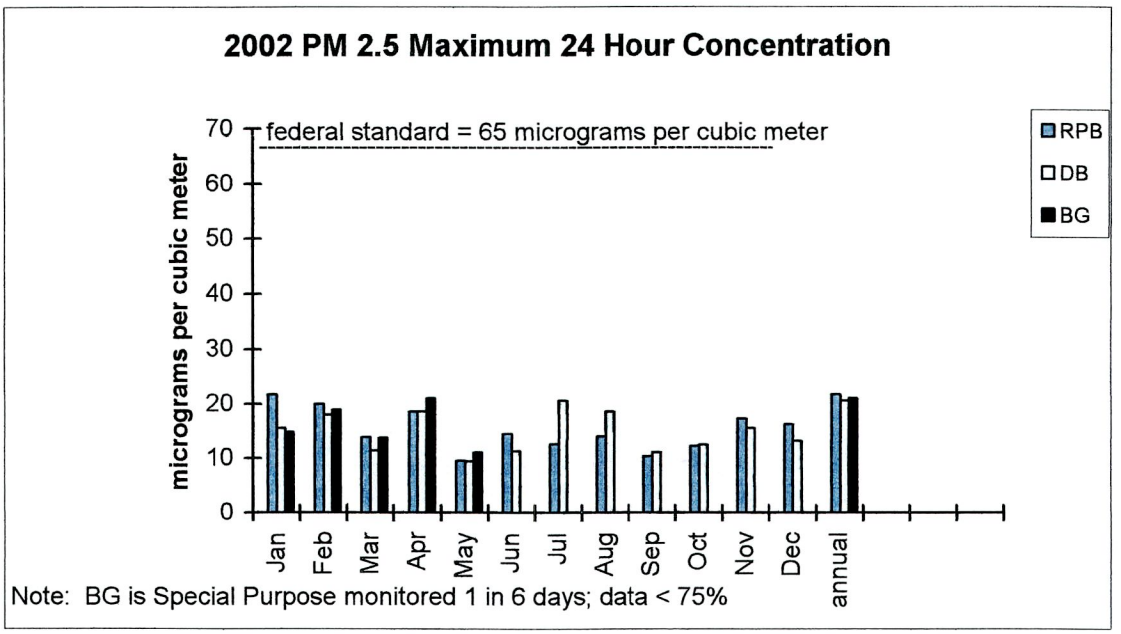


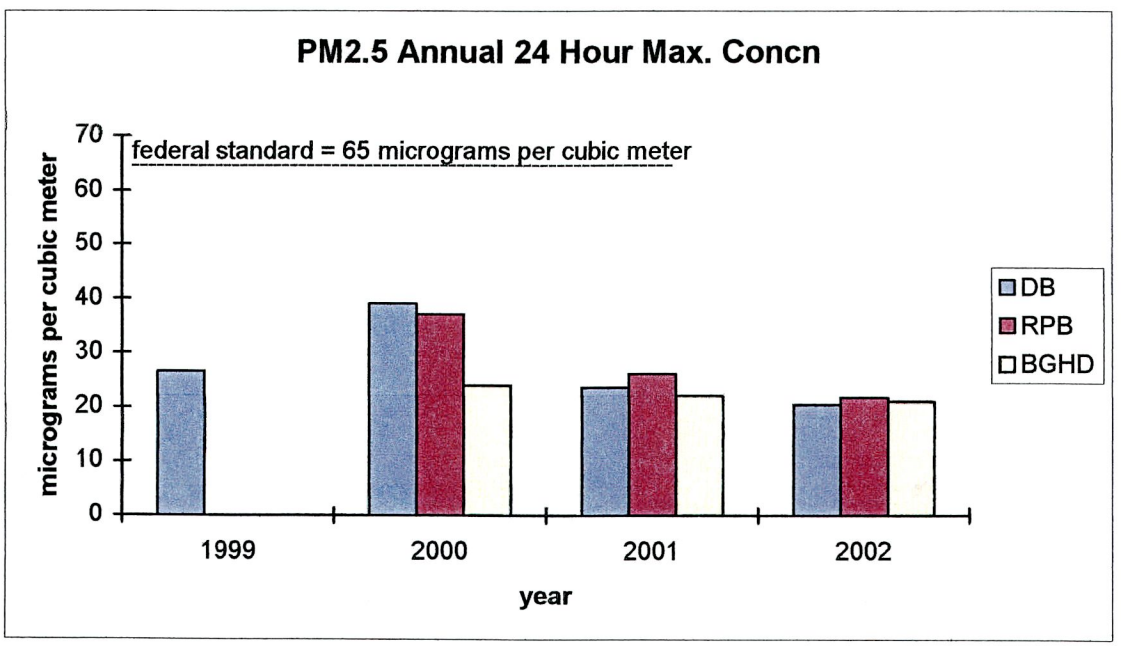
Sulfur Dioxide (SO_2) Data



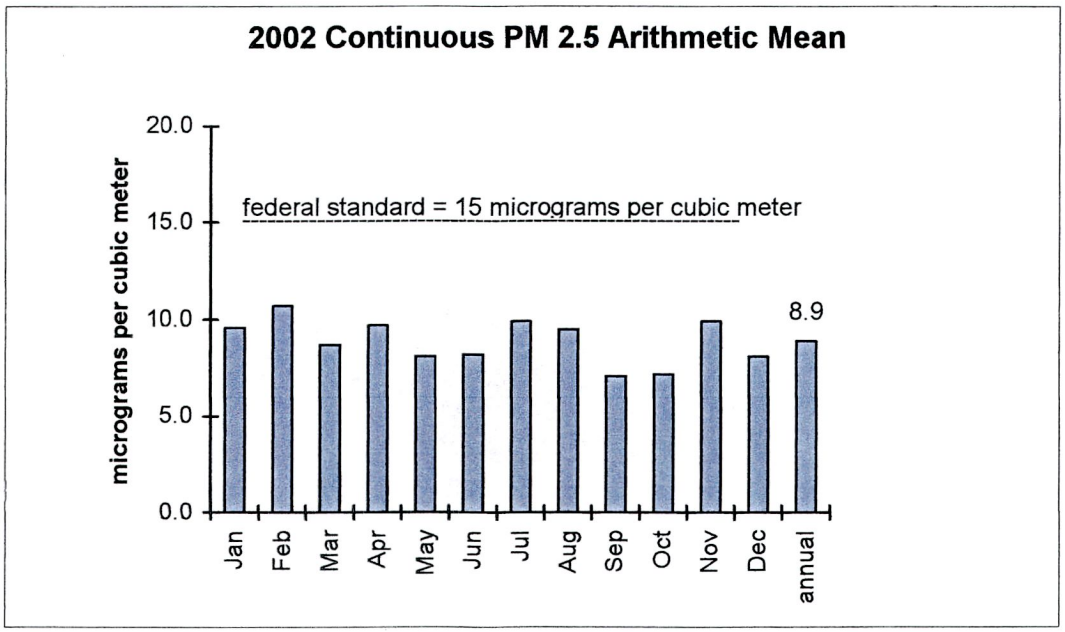


Particulate Matter ($PM_{2.5}$) Data

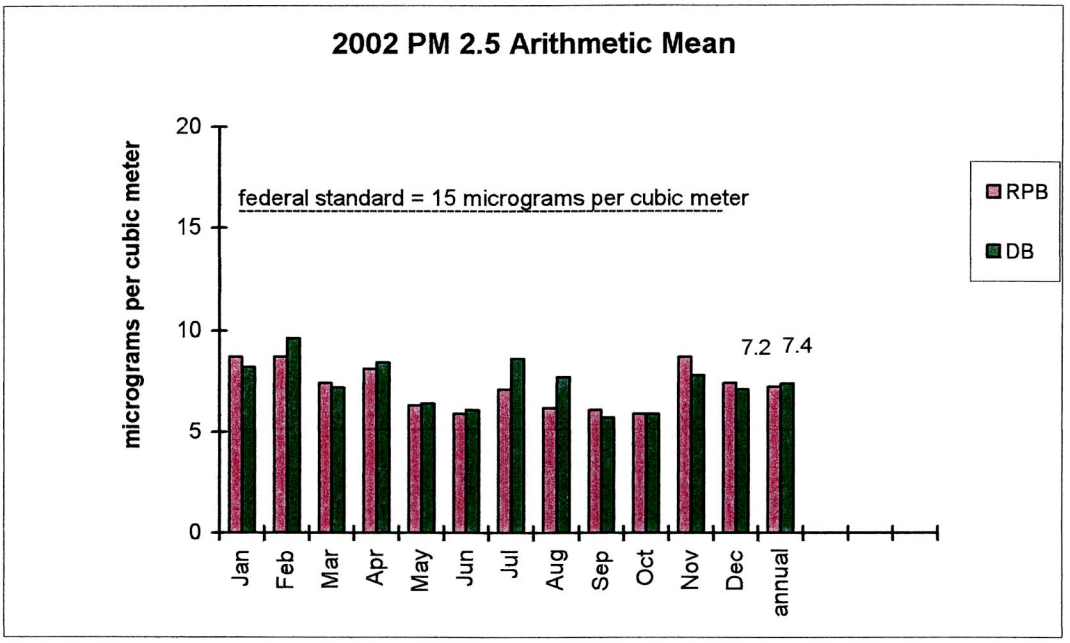


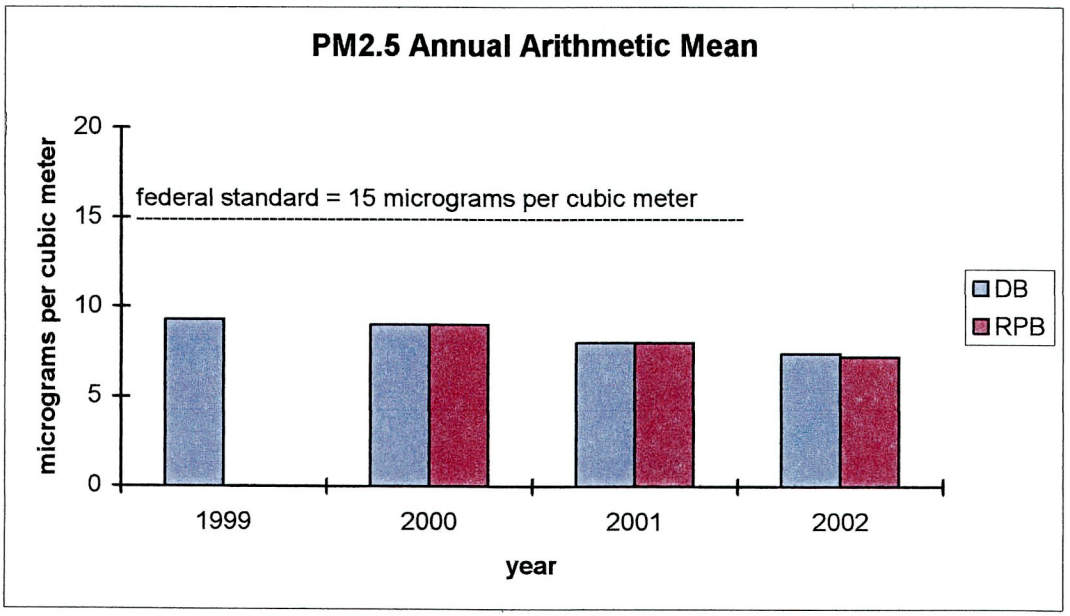


Particulate Matter ($PM_{2.5}$) Data

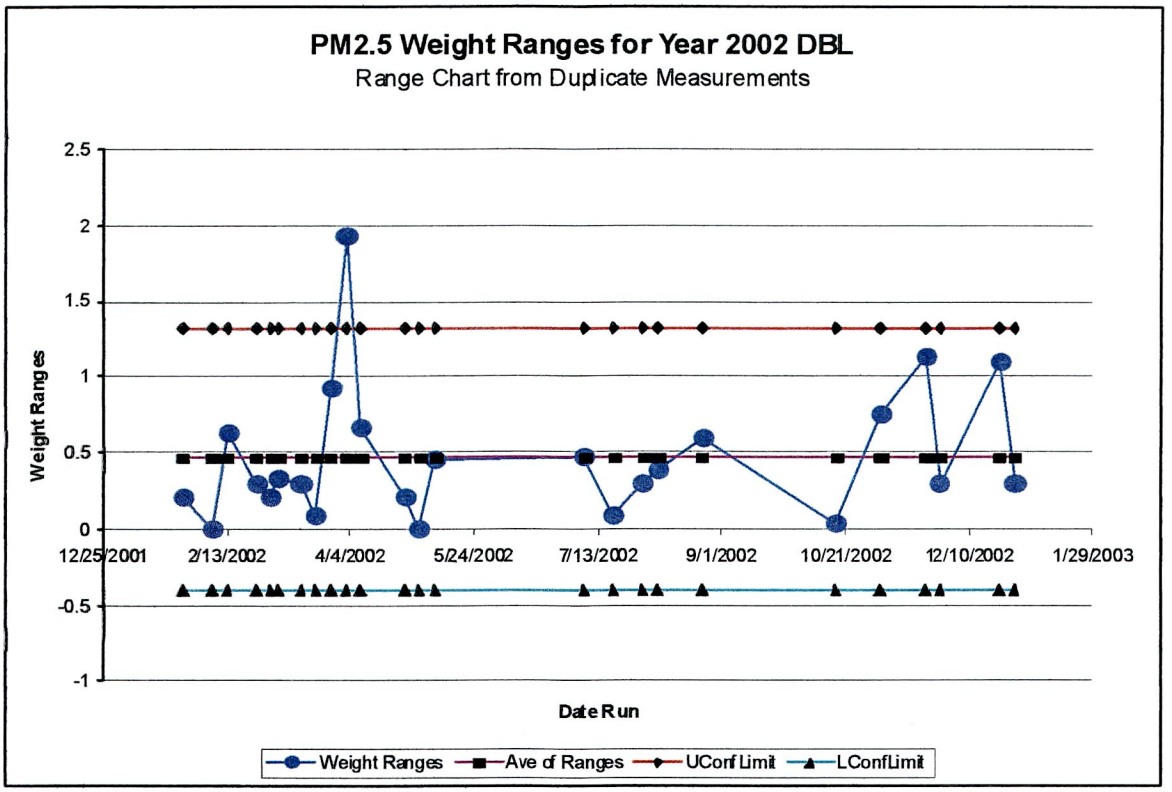


Particulate Matter ($PM_{2.5}$) Data



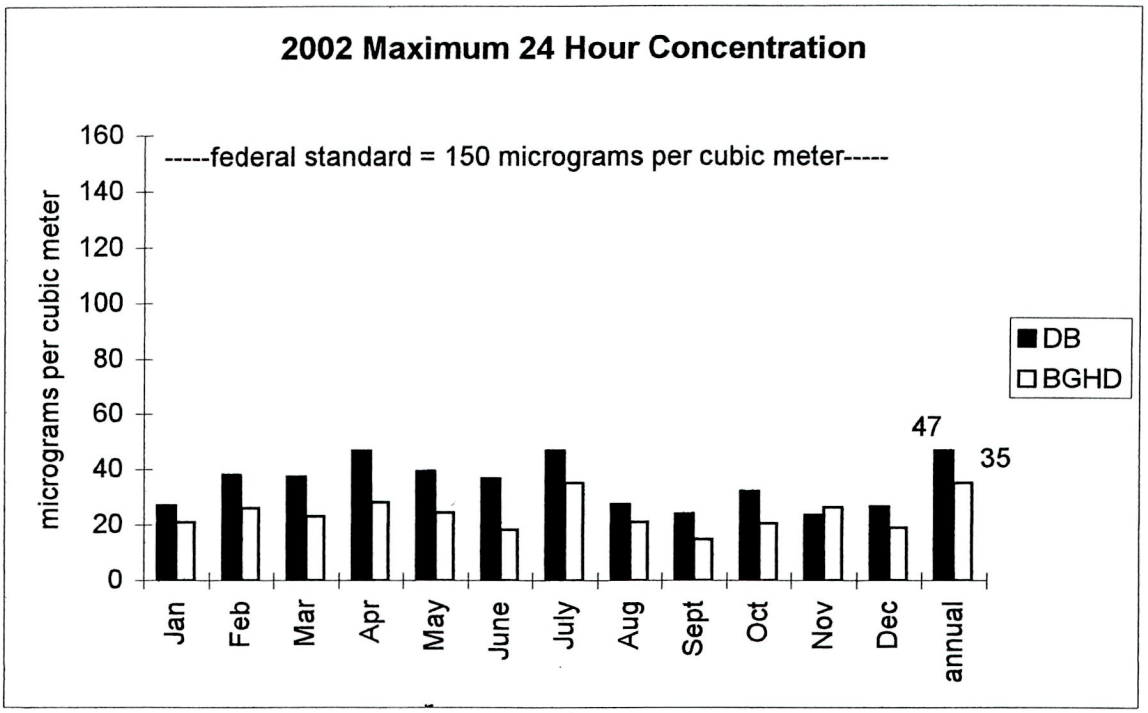


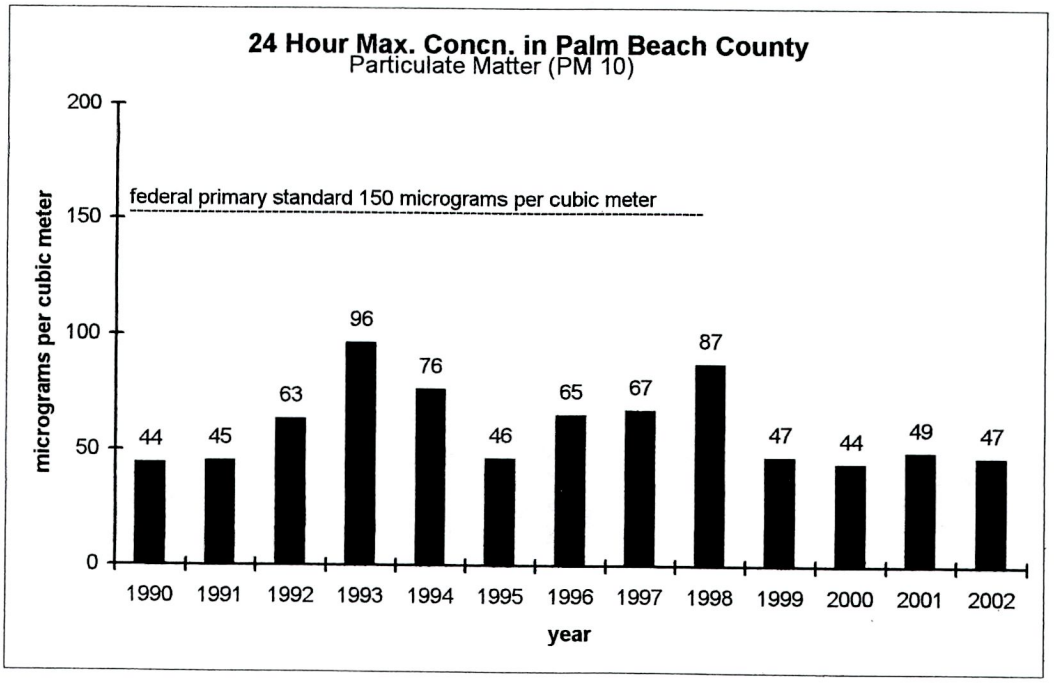
Particulate Matter ($PM_{2.5}$) Data



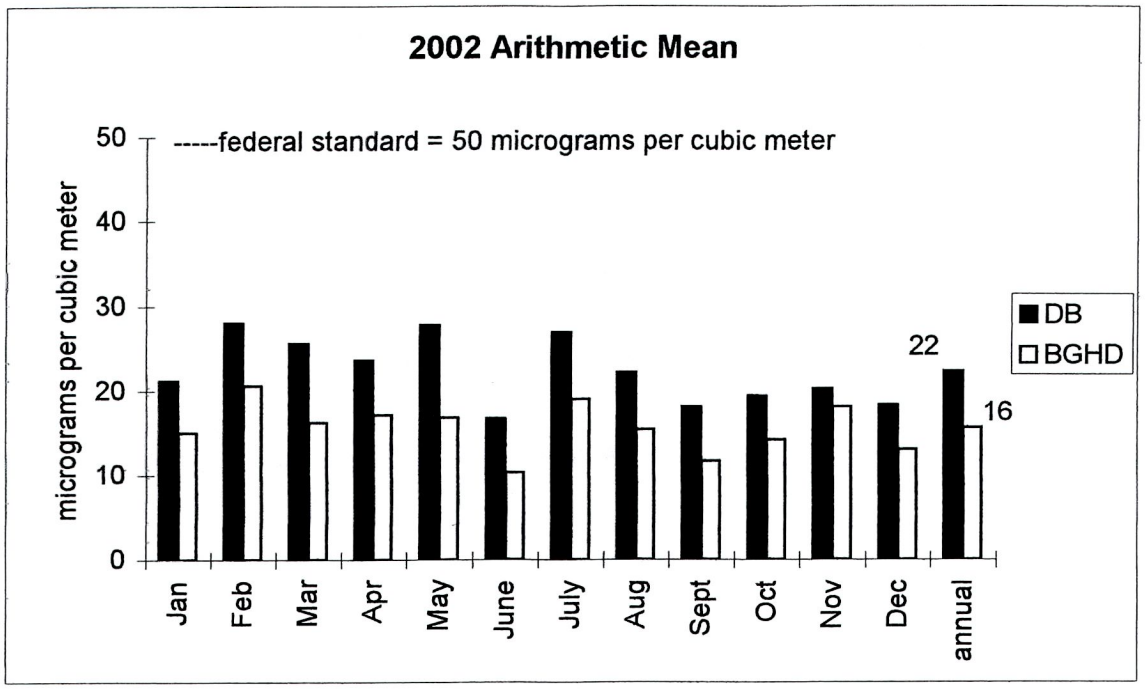
Period:	Year 2002	Delray Beach						
Record #	Date Run	Primary ug	Dup ug	R Range	X average	D %Diff.	CV Coeff. of Var	
	1/26/2002	11.71	11.5	0.21	11.61	1.81	1.28	
	2/7/2002	6.71	6.71	0	6.71	0	0	
	2/13/2002	17.42	18.04	0.62	17.73	3.5	2.47	
	2/25/2002	13.38	13.67	0.29	13.53	2.14	1.51	
	3/3/2002	7.83	8.04	0.21	7.94	2.64	1.87	
	3/6/2002	7.75	8.08	0.33	7.92	4.17	2.95	
	3/15/2002	8.42	8.71	0.29	8.57	3.38	2.39	
	3/21/2002	6.67	6.75	0.08	6.71	1.19	0.84	
	3/27/2002	9.46	10.38	0.92	9.92	9.27	6.55	
	4/2/2002	6.54	8.46	1.92	7.5	25.6	18.1	
	4/8/2002	10.29	9.63	0.66	9.96	6.63	4.69	
	4/26/2002	12.33	12.54	0.21	12.44	1.69	1.2	
	5/2/2002	6.75	6.75	0	6.75	0	0	
	5/8/2002	7.38	7.83	0.45	7.61	5.91	4.18	
	7/7/2002	6.42	6.88	0.46	6.65	6.92	4.89	
	7/19/2002	7.38	7.29	0.09	7.34	1.23	0.87	
	7/31/2002	11.04	10.75	0.29	10.9	2.66	1.88	
	8/6/2002	10.75	11.13	0.38	10.94	3.47	2.45	
	8/24/2002	18.58	18	0.58	18.29	3.17	2.24	
	10/17/2002	7.79	7.83	0.04	7.81	0.51	0.36	
	11/4/2002	8.79	9.54	0.75	9.17	8.18	5.78	
	11/22/2002	11.42	10.29	1.13	10.86	10.41	7.36	
	11/28/2002	15.54	15.25	0.29	15.4	1.88	1.33	
	12/22/2002	7.17	6.08	1.09	6.63	16.44	11.62	
	12/28/2002	6.29	6	0.29	6.15	4.72	3.34	
POOLED CV=		5.347663						
Ave of Ranges =		0.46						
Ave of Ave X bar bar=		9.8						
UCL=		1.32						
LCL		-0.4						

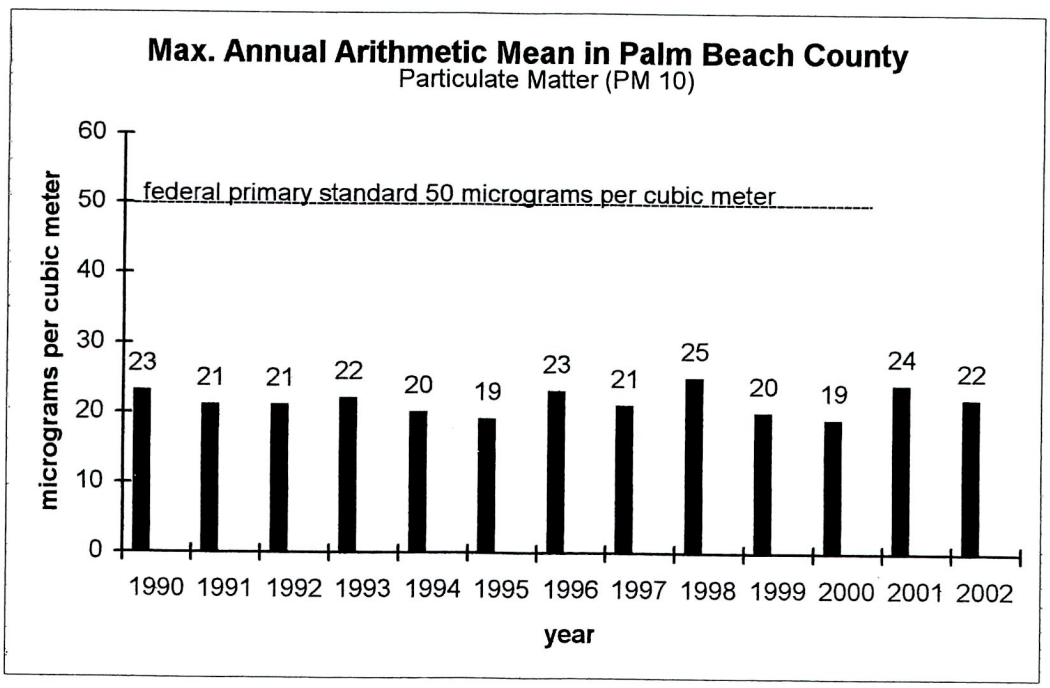
Particulate Matter (PM_{10}) Data





Particulate Matter (PM_{10}) Data





EXCEEDANCES

There were no exceedances recorded in 2002.

AUDIT RESULTS

The Florida Department of Environmental Protection conducted performance audits in 2002.

Quarterly Performance Audits by DEP

Date	CO	NO2	S02	O3	PM10	PM2.5
1 Qtr	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*
2 Qtr	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*
3 Qtr	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*
4 Qtr	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*	*satisfactory*

EPA Performance Audits

This agency participated in the EPA performance audits for ozone.

EPA Audit of Continuous Monitors (% difference)

Level	Ozone (DB)	explanation
1	19.6	- the cal. curve started at zero, therefore the higher concn. at low values resulted.
2	8.5	Overall % difference for the 3 levels is 10.3%, which is satisfactory.
3	2.7	

Appendix A

Data From Previous Years

AMBIENT AIR CONCENTRATIONS

Site	Dates	CO 1 Hour max (ppm)	CO 8 Hour (ppm)
1	07/16-07/30/71	3.6	3.1
	11/14-12/31/72	7.0	3.7
	01/01-12/31/73	8.9	6.3
	01/01-12/31/74	10.5	8.8
	01/01-12/31/75	8.6	5.0
	01/01-12/31/76	10.5	5.2
	01/01-12/31/77	11.8	8.5
	01/01-12/31/78	8.6	4.5
	01/01-11/08/79	7.8	3.1
	01/01-12/31/80	9.8	5.7
	01/01-12/31/81	13.3	5.8
	01/01-12/31/82	21.3	8.1
	01/01-12/31/83	8.9	6.5
	01/01-12/31/84	14.0	5.1
	01/01-12/31/85	7.4	3.3
	01/01-06/19/86	7.6	4.9
2	05/11-05/25/71	2.2	0.3
3	07/30-08/13/71	3.2	0.9
4	03/26-04/12/71	2.1	0.3
5	03/12-03/26/71	2.1	0.4
6	01/27-02/12/71	9.6	4.2
	12/29-01/12/71	2.6	0.4
7	02/26-03/12/71	0.8	0.1
	11/09-12/10/71	2.2	2.0
8	02/12-02/26/71	5.2	3.0
25	06/27-12/31/86	7.2	3.4
PBI	01/01-12/31/87	7.1	4.1
	01/01-12/31/88	7.3	4.6
	01/01-12/31/89	7.2	5.1
	01/01-12/31/90	6.1	3.6
	01/01-12/31/91	5.3	3.1
	01/01-12/31/92	6.3	4.8
	01/01-12/31/93	5.5	3.5
	01/01-12/31/94	5.7	2.9
	01/01-12/31/95	7.0	2.9
	01/01-12/31/96	3.6	6.5
	01/01-12/31/97	10.9	6.4
	01/01-12/31/98	6.0	2.7
	01/01-12/31/99	4.2	3.3
	01/01-12/31/00	3.8	2.7
	01/01-12/31/01	3.3	2.5
33	07/16-12/31/93	7.9	5.1
CC	01/01-12/31/94	7.2	3.5
	01/01-12/31/95	7.8	4.7
	01/01-12/31/96	5.9	5.4
	01/01-06/12/97	6.8	5.0

AMBIENT AIR CONCENTRATIONS

Site	Dates	CO 1 Hour Max (ppm)	CO 8 Hour (ppm)
34	01/01-12/31/98	5.4	3.0
PBCO	01/01-12/31/99	5.5	3.9
	01/01-12/31/00	6.6	2.9
PBI	01/01-12/31/01	3.2	2.5
	01/01-12/31/02	3.9	3.3

Site	Dates	NO_2 Annual Arithmetic Mean (ppm)
1	07/17-07/31/70	0.016
	04/12-04/27/71	0.026
	07/16-07/30/71	0.018
	11/14-12/31/72	0.020
	01/01-11/15/73	0.007
	01/01-12/31/74	0.015
	01/01-12/31/75	0.015
	01/01-12/31/76	0.009
	01/01-12/31/77	0.017
	01/01-12/31/78	0.012
	01/01-11/28/79	0.016
	01/01-12/31/80	0.018
	01/01-12/31/81	0.012
	01/01-12/31/82	0.038
	01/01-12/31/83	0.010
	01/01-12/31/84	0.015
	01/01-12/31/85	0.012
	01/01-06/19/86	0.018
2	06/16-07/02/70	0.010
	05/11-05/25/71	0.013
	08/12-08/27/71	0.013
3	07/02-07/17/70	0.010
	04/27-05/11/71	0.017
	07/30-08/13/71	0.018
	05/18-06/30/72	0.010
	01/01-12/31/76	0.006
	01/01-12/31/77	0.010
	01/01-03/31/78	0.014
4	07/31-08/14/70	0.016
	03/26-04/12/71	0.018
	09/23-10/14/71	0.018
	11/10-11/19/71	0.020
5	09/04-09/18/70	0.013
	03/12-03/26/71	0.018
	10/19-11/01/71	0.029
6	08/21-09/04/70	0.015

	01/27-02/12/71	0.047
	12/29-01/12/71	0.022
	07/05-08/01/72	0.011

AMBIENT AIR CONCENTRATIONS

Site	Dates	NO_2 Annual Arithmetic Mean (ppm)
7	09/28-10/12/71	0.007
	02/26-03/12/71	0.016
	11/09-12/10/71	0.019
8	10/12-10/26/70	0.017
	02/12-02/26/71	0.022
	12/10-12/29/71	0.024
13	11/14-12/31/73	0.003
	01/01-12/31/74	0.004
	01/01-12/31/75	0.008
	01/01-12/31/76	0.005
	01/01-12/31/77	0.008
	01/01-12/31/78	0.010
14	11/14-12/31/73	0.004
	01/01-12/31/74	0.005
	01/01-12/31/75	0.012
	01/01-12/31/76	0.008
	01/01-12/31/77	0.015
	01/01-12/31/78	0.015
25	06/27-12/31/86	0.011
PBI	01/01-12/31/87	0.012
	01/01-12/31/88	0.014
	01/01-12/31/89	0.013
	01/01-12/31/90	0.014
	01/01-12/31/91	0.012
	01/01-12/31/92	0.011
	01/01-12/31/93	0.012
	01/01-12/31/94	0.012
	01/01-12/31/95	0.012
	01/01-12/31/96	0.013
	01/01-12/31/97	0.013
	01/01-12/31/98	0.013
	01/01-12/31/99	0.014
	01/01-12/31/00	0.016
	01/01-12/31/01	0.017
	01/01-12/31/02	0.017

AMBIENT AIR CONCENTRATIONS

		Ozone		
Site	**Dates**	**1 Hour (ppm)**	**Design Value (ppm)**	
1	09/06-12/31/73	0.111	0.130	
	01/01-12/31/74	0.077	0.078	
	01/01-12/31/75	0.104	0.097	
	01/01-12/31/76	0.148	0.154	
	01/01-12/31/77	0.106	0.106	
	01/01-12/31/78	0.075	0.079	
16	01/03-12/31/80	0.098	0.097	
	01/01-12/31/81	0.095	0.095	
	01/01-12/31/82	0.080	0.084	
	01/01-12/31/83	0.087	0.088	
	01/01-12/31/84	0.095	0.096	
	01/01-12/31/85	0.094	0.097	
	01/01-12/31/86	0.102	0.104	
	01/01-12/31/87	0.092	0.088	
	01/01-12/31/88	0.087	0.090	
	01/01- 8/21/89	0.099	0.090	
21	03/01-12/31/79	0.082	0.081	
RPB	01/01-12/31/80	0.110	0.109	
	01/01-12/31/81	0.103	0.098	
	01/01-12/31/82	0.122	0.106	
	01/01-12/31/83	0.092	0.091	
	01/01-12/31/84	0.090	0.098	
	01/01-12/31/85	0.089	0.092	
	01/01-12/31/86	0.096	0.103	
	01/01-12/31/87	0.110	0.097	
	01/01-12/31/88	0.107	0.105	
	01/01-12/31/89	0.113	0.113	
	01/01-12/31/90	0.100	0.098	
	01/01-12/31/91	0.096	0.085	
	01/01-12/31/92	0.075	0.076	
	01/01-12/31/93	0.114	0.111	
	01/01-12/31/94	0.095	0.093	
	01/01-12/31/95	0.088	0.083	
	01/01-12/31/96	0.087	0.084	
	01/01-12/31/97	0.087	0.083	
	01/01-12/31/98	0.094	0.09	
	01/01-12/31/99	0.066	0.053	4th highest 8 hour
29	08/22-12/31/89	0.073	0.085	
DB	01/01-12/31/90	0.080	0.100	
	01/01-12/31/91	0.091	0.100	
	01/01-12/31/92	0.073	0.074	
	01/01-12/31/93	0.127	0.122	
	01/01-12/31/94	0.101	0.095	
	01/01-12/31/95	0.098	0.094	
	01/01-12/31/96	0.097	0.097	
	01/01-12/31/97	0.094	0.094	
	01/01-12/31/98	0.108	0.086	
	01/01-12/31/99	0.108	0.079	4th highest 8 hour
	01/01-12/31/00	0.096	0.074	"
	01/01-12/31/01	0.102	0.073	"
	01/01-12/31/02	0.091	0.057	

35	01/01-12/31/00	0.083	0.068	4th highest 8 hour
RPB	01/01-12/31/01	0.107	0.071	"
	01/01-12/31/02	0.082	0.058	

AMBIENT AIR CONCENTRATIONS

Site	Dates	PM_{10} 24 Hour max ($\mu g/m^3$)	PM_{10} Annual Arithmetic Mean ($\mu g/m^3$)
1A	1990	28	19.0
WPB	1991	42.5	18.7
	1992	63	20
	1993	93	22
12	1990	22	15.6
MM	1991	45.1	18.7
	1992	56	18
	1993	83	21
16	1990	38	17.3
WMD	1991	37.4	17.8
	1992	41	19
	1993	41	20
24	1990	43	22.7
BGHS	1991	39.1	21.0
	1992	44	20
	1993	85	19
	1994	76	18
	1995	41	19
25	1990	30	20.2
PBI	1991	40.9	18.3
	1992	63	21
	1993	94	20
	1994	67	20
	1995	45	19
	1996	63	19
	1997	60	20
26	1990	34	17.5
PGA	1991	44	19.9
	1992	63	19
	1993	44	17
	1994	65	17
	1995	43	17
	1996	65	18
	1997	62	20
27	1990	44	20.1
DBL	1991	40.7	18.8
	1992	62	21
	1993	96	21
	1994	61	19
	1995	46	18
	1996	61	19
	1997	67	21
	1998	87	24
	1999	47	26
	2000	40	19
DB	2001	49	24
	2002	47	22
30	1990	41	21.9
PAH	1991	40.2	19.7

	1992	39	18
	1993	27	17

AMBIENT AIR CONCENTRATIONS

Site	Dates	PM_{10} 24 Hour max ($\mu g/m^3$)	PM_{10} Annual Arithmetic Mean ($\mu g/m^3$)
31	1996	59	23
BGHD	1997	45	20
	1998	82	25
	1999	46	30
	2000	44	19
	2001	49	20
	2002	35	16

Site	Dates	$PM_{2.5}$ Annual 24 Hour max ($\mu g/m^3$)	$PM_{2.5}$ Annual Arithmetic Mean ($\mu g/m^3$)
25	2000	36	11
PBI	2001	33.9	9.9
	2002	139	8.9
27	2000	39	9
DBL	2001	23.7	8
DB	2002	20.5	7.4
31	2000	24	
BGHD	2001	22.1	6.5
	2002	21	8.5
35	2000	37	9
RPB	2001	26.1	8
	2002	21.7	7.2

Site	Dates	SO_2 3 Hour max (ppm)	SO_2 24 Hour max (ppm)	SO_2 Annual Arithmetic Mean (ppm)
1	07/17-07/31/70	0.038	0.007	
	04/12-04/27/71	0.028	<0.006	
	07/16-07/30/71	0.012	0.002	
	11/14-12/31/72	0.021	0.003	
	01/01-11/14/73	0.034	0.004	
	11/14-12/31/73	0.008	0.001	
	01/01-12/31/74	0.075	0.052	
	01/01-12/31/75	0.062	0.025	
	01/01-12/31/76	0.055	0.034	
	01/01-12/31/77	0.019	0.015	
	04/01-06/30/78	0.030	0.022	
	01/01-10/22/79	0.024	0.017	
2	06/16-07/02/70	0.026	0.010	
	05/11-05/25/71	0.142	0.028	
	08/13-08/27/71	0.015	0.003	
3	07/02-07/17/70	0.128	0.028	
	04/27-05/11/71	0.324	0.060	
	07/30-08/13/71	0.035	0.005	
	05/18-06/30/72	0.032	0.006	
	09/03-12/31/76		0.004	

	01/01-12/31/77			0.004	
4	07/31-08/14/70		0.024	0.010	
	03/26-04/12/71		0.034	0.012	
	09/23-10/04/71		0.035	0.006	
5	09/04-09/18/70		0.029	0.003	
	03/12-03/26/71		0.028	0.005	
	10/19-11/01/71		0.002	0.0003	

AMBIENT AIR CONCENTRATIONS

Site	Dates	SO_2 1 Hour max (ppm)	SO_2 3 Hour max (ppm)	SO_2 24 Hour max (ppm)	SO_2 Annual Arith. Mean (ppm)
6	08/21-09/04/70		0.048	0.013	
	01/27-02/12/71		0.098	0.017	
	12/29-01/12/72		0.034	0.006	
	07/05-08/01/72		0.012	0.003	
7	09/28-10/12/70		0.048	0.006	
	02/26-03/12/71		0.008	<0.003	
	11/19-12/10/71		0.006	0.001	
8	02/12-02/26/71		0.125	<0.030	
	02/10-12/29/71		0.217	<0.039	
8	09/21/72-05/01/73		0.028	0.007	
	12/01/72-05/18/73		0.098	0.044	
	12/18-12/31/73		0.113	0.025	
	01/01-09/27/74		0.031	0.004	
	07/08-12/31/75		0.074	0.029	
	01/01-12/31/76		0.078	0.051	
	01/01-12/31/77		0.029	0.016	
	01/01-05/19/78		0.043	0.019	
17	09/27-12/31/76			0.003	
	01/01-12/31/77			0.003	
22	07/24-12/31/80		0.014	0.013	
	01/01-12/31/81		0.031	0.019	
	01/01-12/31/82		0.053	0.019	
	01/01-12/31/83		0.025	0.015	
	01/01-12/31/84		0.052	0.014	
	01/01-12/31/85		0.040	0.009	
	01/01-12/31/86		0.022	0.010	0.001
	01/01-12/31/87		0.020	0.006	0.001
	01/01-05/12/88		0.015	0.003	0.000
28	05/12-12/31/88		0.022	0.004	0.000
RBWH	01/01-12/31/89		0.039	0.010	0.002
	01/01-12/31/90		0.039	0.007	0.002
	01/01-12/31/91		0.057	0.010	0.002
	01/01-12/31/92		0.059	0.010	0.003
	01/01-12/31/93		0.110	0.029	0.004
	01/01-12/31/94		0.092	0.019	0.002
	01/01-12/31/95	0.133	0.114	0.026	0.001
	01/01-12/31/96	0.123	0.077	0.018	0.002
	01/01-12/31/97	0.186	0.063	0.019	0.002

01/01-12/31/98	0.202	0.068	0.010	0.000
01/01-12/31/99	0.019	0.017	0.013	0.005
01/01-12/31/00	0.015	0.014	0.010	0.003
01/01-12/31/01	0.006	0.005	0.003	0.000

AMBIENT AIR CONCENTRATIONS

Total Hydrocarbons

Site	Dates	1 Hour max (ppm)	8 Hour max (ppm)
1	11/14-12/31/72	6.5	3.2
	01/01-12/31/73	5.5	3.3
	01/01-12/31/74	5.8	4.4
	01/01-12/31/75	5.2	3.0
	01/01-12/31/76	5.3	3.7
	01/01-12/31/77	5.2	3.6
	10/18-12/31/78	5.8	3.2
	01/01-12/31/79	8.3	2.9
	01/01-12/31/80	9.6	6.2
	01/01-08/14/81	8.4	3.5

AMBIENT AIR CONCENTRATIONS

Total Hydrocarbons

Site	Dates	1 Hour max (ppm)	8 Hour max (ppm)
3	05/18-06/30/72	3.2	2.2

Total Oxidants

Site	Dates	1 Hour max (ppm)	8 Hour max (ppm)
1	07/17-07/31/70	0.114	0.073
	04/12-04/27/71	<0.188	<0.130
	07/16-07/30/71	0.032	0.026
	11/14-12/31/72	<0.187	<0.040
	01/01-11/01/73	0.155	0.063
2	06/16-07/02/70	0.104	0.093
	05/11-05/25/71	0.010	0.004
	08/13-08/27/71	0.016	0.018
3	07/02-07/17/70	0.176	0.086
	04/27-05/11/71	0.111	0.055
	07/30-08/13/71	0.007	0.001
	05/18-06/30/72	0.116	0.071
4	07/31-08/14/70	0.129	0.089
	03/26-04/12/71	0.110	0.106
	09/23-10/04/71	0.056	0.048
	11/10-11/19/71	0.078	0.073
5	09/04-09/18/70	0.092	0.066
	03/12-03/26/71	0.013	0.086
	10/19-11/01/71	0.136	0.101

6	08/21-09/04/70	0.048	0.037
	01/27-02/12/71	0.110	0.095
	07/05-08/01/72	0.050	0.027
7	09/28-10/12/70	0.076	0.068
	02/26-03/12/71	0.110	0.093
	11/19-12/10/71	0.038	0.016
8	10/12-10/26/70	0.078	0.061
	02/12-02/26/71	0.103	0.076
	02/10-12/29/71	0.012	0.006

AMBIENT AIR CONCENTRATIONS

		Total Suspended Particulates		
Site	**Dates**	**24 Hour Maximum ($\mu g/m^3$)**	**Annual Arithmetic Mean ($\mu g/m^3$)**	**Annual Geometric Mean ($\mu g/m^3$)**
1A	1971	121.1	58.7	53.4
WPB	1972	133.6	49.9	45.9
	1973	101.9	40.5	38.0
	1974	96.4	40.9	38.8
	1975	81.5	44.7	42.4
	1976	106.2	37.4	35.3
	1977	172	42.0	38.3
	1978	92	41.3	38.2
	1979	88	41.0	38.5
	1980	78	43.9	42.2
	1981	119	49.4	45.8
	1982	72	35.3	33.2
	1983	124	36.8	32.9
	1984	71	36.7	34.5
	1985	102	35.2	32.9
	1986	88	37.1	34.0
	1987	102	40.8	37.0
	1988	67	32	29.5
	1989	75	31.1	29.1
	1990	63	29.2	
2	1971	122.3	34.6	30.3
	1972	112.3	33.0	31.4
	1973	85.4	33.6	30.6
	1974	104.0	32.4	34.1
	1975	77.7	36.4	33.4
	1976	63.1	35.5	30.9
	1977	74	33.6	
3	1971	167.5	40.6	30.7
	1972	94.8	37.0	33.7
	1973	133.2	38.2	35.3
	1974	132.7	35.8	32.2
	1975	91.8	38.3	34.5
	1976	67.8	31.4	29.1
	1977	62	30.4	28.4
	1978	65	32.1	30.2
	1979	85	37.8	35.3
	1980	90	41.5	39.2

	1981	115	42.6	39.0
	1982	59	28.4	26.4
	1983	117	28.4	25.6
	1984	54	30.8	29.2
	1985	75	32.1	28.0
	1986	53	31.2	29.0
4	1971	95.6	37.2	31.7
	1972	89.8	34.8	32.2
	1973	85.6	37.7	35.3
	1974	196.8	45.2	38.8
	1975	435.3	57.1	47.9
	1976	81.0	38.2	35.8

AMBIENT AIR CONCENTRATIONS

Total Suspended Particulates

Site	Dates	24 Hour Maximum ($\mu g/m^3$)	Annual Arithmetic Mean ($\mu g/m^3$)	Annual Geometric Mean ($\mu g/m^3$)
4	1977	84	41.0	39.1
	1978	85	44.6	42.1
	1979	101	44.7	42.0
	1980	90	47.8	45.0
	1981	123	49.0	45.3
	1982	121	38.2	35.1
	1983	130	38.7	35.0
	1984	81	42.4	39.9
	1985	143	40.3	37.0
	1986	94	41.7	36.9
	1987	251	49.2	42.5
5	1971	142.4	36.4	32.0
	1972	108.0	38.5	35.4
	1973	92.9	40.0	37.6
	1974	81.9	34.8	32.2
	1975	83.5	42.0	39.5
	1976	61.1	35.8	34.0
	1977	81	39.1	37.0
	1978	99	37.6	35.0
	1979	102	40.4	37.6
	1980	82	42.7	41.1
	1981	122	46.2	42.5
	1982	76	35.4	33.2
	1983	126	37.2	34.1
	1984	65	36.8	34.8
	1985	134	38.6	35.6
	1986	85	38.5	35.6
	1987	119	42.0	37.2
6	1971	237.9	49.1	41.1
	1972	275.3	44.9	39.9
	1973	106.5	43.1	40.2
	1974	92.4	41.6	38.4
	1975	114.8	45.4	42.7
	1976	62.8	35.6	33.8
	1977	79	39.3	37.0
	1978	107	42.2	39.3
	1979	124	47.3	43.8
	1980	94	47.0	44.8

	1981	131	48.6	45.7
	1982	70	27.8	32.6
	1983	134	36.3	33.4
	1984	67	37.1	34.9
	1985	146	39.6	37.0
	1986	78	37.5	35.4
	1987	100	42.0	38.6
	1988	64	36	
7	1971	131.5	30.7	24.4
	1972	102.0	31.8	28.3
	1973	65.5	28.1	26.2

AMBIENT AIR CONCENTRATIONS

		Total Suspended Particulates		
Site	**Dates**	**24 Hour Maximum ($\mu g/m^3$)**	**Annual Arithmetic Mean ($\mu g/m^3$)**	**Annual Geometric Mean ($\mu g/m^3$)**
7	1974	98.3	25.6	22.3
	1975	70.5	33.0	30.4
	1976	55.2	23.1	21.0
	1977	64.0	24.3	22.5
	1978	36.0		
8	1971	222.7	61.4	53.1
	1972	173.3	58.6	52.3
	1973	151.0	59.8	54.0
	1974	210.9	59.8	54.2
	1975	199.4	62.4	56.7
	1976	125.2	61.6	56.3
	1977	149.0	59.0	54.6
	1978	143.0	58.8	53.1
9	1971			
	1972	74.5	31.2	
	1973	145.3	33.2	28.7
	1974	81.2	29.9	30.7
	1975	65.3	34.1	27.0
	1976	59.1	28.2	32.2
	1977	33.0		26.3
10	1971			
	1972	94.8	44.4	41.6
	1973	109.0	45.3	42.5
	1974	113.0	43.0	39.0
	1975	81.7	47.2	45.4
	1976	101.6	42.8	40.5
	1977	98.0	41.4	39.2
	1978	77.0	46.0	43.6
	1979	80.0	46.2	43.3
	1980	87.0	51.2	48.9
	1981	122.0	53.1	48.4
	1982	72.0	38.2	36.2
	1983	122.0	42.9	39.5
	1984	119.0	45.3	41.3
	1985	91.0	36.6	36.3

	1986	83.0	41.9	39.3
	1987	143.0	52.8	47.4
	1988	75.0	42.0	
11	1971			
	1972	69.9	32.1	29.2
	1973	77.8	30.8	28.9
	1974	134.3	34.4	29.4
	1975	299.9	44.9	37.7
	1976	60.8		

AMBIENT AIR CONCENTRATIONS

		Total Suspended Particulates		
Site	**Dates**	**24 Hour Maximum ($\mu g/m^3$)**	**Annual Arithmetic Mean ($\mu g/m^3$)**	**Annual Geometric Mean ($\mu g/m^3$)**
12	1972	68.1	29.6	
MM	1973	79.6	31.7	26.9
	1974	200.7	34.9	29.6
	1975	64.7	34.2	29.2
	1976	53.7	26.9	32.4
	1977	66.0	29.8	25.1
	1978	69.0	29.0	27.9
	1979	85.0	35.0	27.2
	1980	107.0	38.5	31.7
	1981	122.0	40.8	35.8
	1982	62.0	27.3	37.0
	1983	116.0	30.4	25.0
	1984	65.0	31.0	27.2
	1985	144.0	34.3	31.6
	1986	97.0	31.0	28.9
	1987	92	35.5	31.2
	1988	51	30.0	28.2
	1989	49	27.4	28.0
	1990	59	27.6	
16	1976	130.1	35.0	31.0
WMD	1977	76	30.9	38.2
	1978	136	31.5	28.7
	1979	87	37.3	33.8
	1980	68	34.2	32.1
	1981	96	43.4	38.4
	1982	128	26.5	23.5
	1983	73	27.8	25.2
	1984	125	33.6	29.8
	1985	102	32.8	29.4
	1986	97	31.0	29.9
	1987	102	37.0	31.8
	1988	115	37.0	33.1
	1989	157	37.1	32.2
17	1976		34.6	31.6
	1977	69		
18/20	1977	63		
	1978	76	30.8	28.8

19/23	1978	121	52.9	49.6
	1979	121	57.5	53.9
	1980	110	58.9	56.5
	1981	166	62.7	56.8
	1982	87	47.8	45.1
	1983	102	45.8	43.1
	1984	110	50.9	47.2

AMBIENT AIR CONCENTRATIONS

		Total Suspended Particulates		
Site	**Dates**	**24 Hour Maximum ($\mu g/m^3$)**	**Annual Arithmetic Mean ($\mu g/m^3$)**	**Annual Geometric Mean ($\mu g/m^3$)**
20	1979	122	50.6	46.4
	1980	164	52.0	47.9
	1981	177	55.6	50.6
	1982	85	41.8	38.6
	1983	100	40.5	38.1
	1984	77	42.0	39.2
	1985	131	42.3	38.7
	1986	110	40.1	36.4
	1987	102	43.8	39.7
	1988	107	41	38
24	1985	82	38.7	35.5
BGHS	1986	101	41.0	37.5
	1987	96	44.3	37.9
	1988	102	41	37
	1989	134	49.8	42.16
25	1988	87	41	
PBI	1989	74	41.8	39.8
	1990	80	41.6	
26	1987	205	38.5	28.8
PGA	1988	99	34	29.8
	1989	56	27.8	26.2
	1990	49	37.7	
27	1988	65	35	33
DBL	1989	112	39.8	37.3
	1990	88	34.8	

AMBIENT AIR CONCENTRATIONS

		Lead			
Site	**Dates**	**Quarterly Arithmetic Mean**			
		1st (ug/m^3)	**2nd (ug/m^3)**	**3rd (ug/m^3)**	**4th (ug/m^3)**
25	1992			0.00	0.00
PBI	1993	0.00	0.00	0.00	0.00
	1994	0.00	0.00	0.00	0.00
	1995	0.00	0.00	0.00	0.00
32	1992			0.00	0.00
IH	1993	0.00	0.00	0.00	0.00

1994	0.00	0.00	0.00	0.00
1995	0.00	0.00	0.00	0.00
1996	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00

Appendix B

Site Histories

SITE HISTORIES

SITE NO.	ADDRESS	UTM ZONE 17	MONITORING CAPABILITY
1	**West Palm Beach Water Treatment Plant First Street & Tamarind Ave. West Palm Beach, Florida**	**2955030N 0593232E**	**NO2-1970-86 CO-1972-86 Gaseous-1970-81 Meteorology Discontinued 1986**
1969:	Original siting, monitor TSP		
1970:	Begin periodic monitoring of SO_2, NOx, and total oxidants.		
1972, May:	Began monitoring for total hydrocarbons.		
1972, Nov:	Add automated meteorological equipment.		
1972:	Add CO monitor, Mine Safety Appliances, Model 200 non-dispersive infrared spectrophotometric automatic analyzer		
1973, Sep 6:	Add Ozone monitor, McMillan Electronic Corporation (MEC), Model 1100 Chemiluminescence analyzer to replace total oxidant monitoring.		
1973, 3 Qtr:	Replace Technicon monitoring SO_2 equipment		
1973, Nov 15:	Replace NO-NOx monitor, McMillan Electronics Corporation (MEC), Model 1200 Chemiluminescence analyzer.		
1977, Oct 6:	Replace CO monitor with a Model 202-S		
1977, Dec 27:	Replace NO-NOx monitor, MEC, Model 1200 with a Monitor Labs, Model 8440.		
1978:	Ozone monitor modified by manufacturer to EPA designated reference method status.		
1979:	Ozone monitor relocated to Site 21, RPB		
1980, July:	SO2 monitor relocated to Site 22 in Riviera Beach.		
1981, Aug:	Discontinue monitoring for total hydrocarbons.		
1985, Feb 5:	Replace CO monitor with Teco Model 48		
1985, Feb 13:	Replace NO-NOx monitor, Monitor Labs, Model 8840 with a new Monitor Labs, Model 8840.		
1986:	Site discontinued and equip. relocated to Site 25 at PBI.		
1A	**Palm Beach County Public Health Unit 901 Evernia Street West Palm Beach, Florida**	**2955030N 0593232E**	**Susp. Part. 1969-92 Discontinued 1993**
1969:	Began monitoring Total Suspended Particulates, two collocated samplers for precision calculations.		
1990, Oct:	Replaced two TSP collocated monitors with two Andersen, Model 1200 to monitor PM_{10}.		
1991, Dec:	Temporarily removed monitors while roof on building was replaced.		
1992, Mar:	Reinstalled PM_{10} monitors.		
1993, Aug 5:	Sahara dust storm.		
1993, Aug:	Discontinued site.		
2	**Tequesta Water Department 357 Tequesta Drive Tequesta, Florida**	**2982018N 0589963E**	**Susp. Part. 1969-77 Gaseous 1970-71 Discontinued 1977**
1969:	Original siting, monitor TSP		
1970:	Began monitoring SO_2, NOx and total oxidants.		
1971:	Discontinued SO_2 and total oxidants monitoring.		
1977:	Discontinued Site.		

3	**North Palm Beach Water Treatment Plant 603 Anchorage Drive North Palm Beach, Florida**	**2965817N 0592780E**	**Susp. Part 1979-86 Discontinued Oct. 1986**
1969:	Original siting, monitor TSP		
1970:	Begin periodic monitoring of SO_2, NOx and total oxidants.		
1986, Oct:	Discontinued Site.		
4	**Lake Worth Water Treatment Plant 301-303 College Street Lake Worth, Florida**	**2943537N 0592793E**	**Susp. Part 1969-88 Discontinued March 1988**
1969:	Original siting, monitor TSP.		
1970:	Begin periodic monitoring of SO_2, NOx and total oxidants.		
1988, Mar:	Discontinued Site.		
5	**Delray Beach Water Treatment Plant 202 N.W. 1st Avenue Delray Beach, Florida**	**2927488N 0592195E**	**Susp. Part 1979-87 Discontinued Apr. 1987**
1969:	Original siting, monitor TSP		
1970:	Begin periodic monitoring of SO_2, NOx and total oxidants.		
1987, April:	Discontinued Site.		
6	**Boca Raton Fire Station #1 1151 N. Federal Highway Boca Raton, Florida**	**2915768N 05913137E**	**Susp. Part 1979-88 Discontinued Aug. 1988**
1969:	Original siting, monitor TSP		
1970:	Begin periodic monitoring of SO_2, NOx and total oxidants.		
1988, Aug:	Discontinued Site.		
7	**Royal Palm Beach Golf Course Royal Palm Beach Boulevard Royal Palm Beach, Florida**	**2951437N 0578767E**	**Susp. Part. 1969-78 Gaseous 1970-71 Discontinued 1978**
1969:	Original siting, monitor TSP		
1970:	Begin periodic monitoring of SO_2, NOx and total oxidants.		
1978:	Site discontinued.		
8	**Belle Glade Water Treatment Plant 1016 West Canal Street Belle Glade, Florida**	**2953082N 0533160E**	**Susp. Part 1969-78 Discontinued 1978**
1969:	Original siting, monitor TSP		
1978:	Site discontinued.		

9	**Grammercy Park** **Water Treatment Plant** **Park Avenue** **Grammercy Park, Florida**	**2960537N** **0587329E**	**Susp. Part.** **1972-77** **Discontinued 1977**
1972:	Original siting, monitor TSP		
1977:	Discontinued site.		
10	**Southwest Fire Department** **1180 S. Military Trail** **West Palm Beach, Florida`**	**2949018N** **0588207E**	**Susp. Part** **1972-88** **Discontinued July 1988**
1972:	Original siting, monitor TSP		
1988, July:	Discontinued Site.		
11	**St. Vincent DePaul Seminary** **S. Military Trail** **Boynton Beach, Florida**	**2932890N** **0586927E**	**Susp. Part.** **1972-76** **Discontinued 1976**
1972:	Original siting, monitor TSP		
1976:	Discontinued Site.		
12	**Lynn University** **3601 N. Military Trail** **Boca Raton, Florida**	**2918354N** **0587320E**	**Susp. Part** **1979-1992** **Discontinued 1993**
1972:	Original siting, monitor TSP		
1990, Oct:	Discontinued TSP monitor		
1990, Nov:	Add Andersen, Model 1200 to monitor PM_{10}.		
1993, Aug 5:	Sahara dust storm.		
1993, Aug:	Discontinued site.		
13	**NOx SIP Site N8** **Florida Atlantic University** **Boca Raton, Florida**	**2917000N** **0589500E**	**NOx 1973-78** **Discontinued 1978**
14	**NOx SIP Site N9** **Palm Beach Mall** **Palm Beach Lakes Boulevard** **West Palm Beach, Florida**	**2956000N** **0590700E**	**NOx 1973-78** **Discontinued 1978**
15	**Division of Forestry** **Lat. 26 deg 41'N, Long 80 deg 16'E** **Loxahatchee, Florida**		**Temperature** **Inversion** **1972-85** **Discontinued 1985**
16	**South Florida Water Mgmt.** **Pump Station** **Twenty Mile Bend** **State Road 80**	**2951402N** **0562879E**	**03 & Meteorology** **1980-88,** **Susp. part 1976-92** **Discontinued 1993**
1976:	Began TSP sampling		
1980, Jan 7:	Added ozone monitor, Monitor Labs, Model 8410 S/N 15204		
1983, Dec 19:	Reassigned ozone monitor, MEC, Model 1100 from Site 21 to Site 16 and reassigned ozone monitor, Monitor Labs, Model 8410 from Site 16 to Site 21		
1984, Jan 23:	Molytek recorder S/N 100781 replaced L & N Speedomax S/N 15204		

1984, Nov 9: Replaced the ozone monitor MEC, Model 1100 with a Monitor Labs, Model 8810 (225) UV Photometer analyzer.

1986, Jul 30: Installed new meterology equipment
1987, Jan 23: Retire the ozone monitor Monitor Labs, Model 8810 S/N 225 and replace with a Monitor Labs 8810 S/N 450.
1987, Aug 17: Site down due to air conditioning failure
1988, Feb 8-10: Site down due to air conditioning failure
1989, Aug 7: The ozone monitoring and metro equipment was relocated to Site 29 in Delray Beach.
1990, Jan: Discontinued TSP monitor
1990, Feb: Began monitoring for PM_{10} using an Andersen, Model 1200 VFC high volume sampler.
1993, Aug: Discontinued site.

17	**Lake Harbor Water Treatment Plant** **Lake Harbor, Florida**	**2952230N** **0518600E**	**Susp. Part. 1977** **Discontinued 1977**
18	**Pahokee Health Department** **1759 E. Main Street** **Pahokee, Florida**	**2967222N** **0533760E**	**Susp. Part.** **1977-78** **Discontinued 1978**
19	**Belle Glade Fire Station** **22 W. Avenue "A"** **Belle Glade, Florida**	**2951420N** **0532900E**	**Susp. Part 1978** **Discontinued Nov 4, 1983**
20	**Pahokee Sewage Treatment Plt** **1050 McClure Rd** **Pahokee, Florida**	**2964200N** **0532300E**	**Susp Part** **1979-89** **Discontinued 1989**
21	**Royal Palm Beach R.V. Area** **10999 Okeechobee Boulevard** **Royal Palm Beach, Florida**	**2954150N** **0578100E**	**O3 Meteorology** **1979-98** **Discontinued Aug 25, 1999**

1979, Mar 1: Ozone monitor, MEC, Model 1100 relocated from Site 1
1983, Dec 13: Replaced ozone monitor MEC, Model 1100 with ML 8410, S/N 1504, recorder S/N 30111
1984, Aug 14: Air conditioning broken
1985, Apr 4: Set up new trailer

1986, Feb 28: Retire to "stand by" the ozone monitor Monitor Labs, Model 8410 and replace with a Monitor Labs, Model 8810 S/N 359 UV Photometer analyzer.
1986, Aug 1: Installed new meteorology instruments
1987, Mar 25: Replaced DAS SX405 S/N 076 with SX405 S/N 525
1987, May 28 - July 2: Site down for air conditioning repair
1987, Aug 19 -20: Air conditioning failed
1989, Apr 4: Replaced pinched sample line
0506
1989, Jul 13-17: Site down for air conditioning repair
1989, Dec 18: Air conditioning failed
1991, Sep 20: Replaced wind speed and direction monitor, Texas Electronics, Model 446A with Texas Electronics, Model R2 Series.
1992, May 11-15: Metro tower down, bolts sheared off
1993, July 1 Replaced ETC Model 6002 S/N 178 with ETC Model 6002 S/N 192
1993, July 19 Air conditioner malfunction
1993, July 20 Air conditioner repaired
1993, Aug 21 Shut down circuit breaker, fear of fire hazard from malfunctioning AC drain, submerged AC circuitry
1993, Aug 25 New air conditioner installed and operational
1993, Sept 8 Removed wind speed sensor for shipment back for repair
1994, Nov 30 Replaced ozone monitor ML 8810 with ML 9812
1995, Feb 9 Installed new field primary, ML 9811 S/N 1707.
1995, June 26 Replaced Hayes 300 baud Modem with Hayes 14.4 at 2400 baud.

1995, Dec 28	Installed new UPS.
1997, Aug 21	High shelter temperatures due to electrical storm - AC outlet shorted out.
1997, Aug 25	EMC data system installed and initialized.
1997, Sept 8	AD board problem with EMC system.
1997, Sept 23	Telephone line damaged at pole.
1997, Dec 1	Erratic data values experienced due to use of cleaning chemicals inside trailer.
1998, Feb 12	Replaced MET equipment.
1998, June 25	ATM sensor installed.
1998, Sept 16	Ozone analyzer locked up-floppy drive not working; may be the reason for the lockup.
1998, Sept 29	Not using floppy drive for backup. Using ETC datalogger.
1999, July 20	Installed new EMC program.
1999, Aug 25	Final zero-span at this site.

22	**Palm Beach County Health Department Warehouse 2030 Avenue "L" Riviera Beach, Florida**	**296235N 059248E**	**SO2 1980-88 Discontinued May 1988**
1980, Jul:	Begin monitoring SO2 using a Beckman 904-A Sulfur Dioxide analyzer based on colormetric titration. Replace Beckman 904-A Sulfur Dioxide analyzer with Monitor Labs, Model 8850.		
1988, May:	Relocate SO2 monitoring equipment to Site 28.		
1988, May 12:	Discontinued Site. Relocated equipment to Site 28		

23	**Belle Glade Health Dept. 1024 N.W. Avenue "D" Belle Glade, Florida**	**2953082N 053160E**	**Gaseous 1970-78 Discontinued 1978 Susp. Part. Discontinued May, 1985**
1970:	Begin periodic monitoring of SO_2, NOx and total oxidants.		
1972, Sept:	Began special study of SO_2 levels and meteorological parameters.		
1978, May:	Discontinued special study of SO_2 levels and meteorology.		
1983, Dec:	Began TSP sampling		
1985, May:	Discontinued Site.		

24	**Glades Central High School 425 W. Canal St. No. Belle Glade, Florida**	**295180N 053245E**	**Susp. Part. 1985-1995**
1985:	Began monitoring for Total Suspended Particulates.		
1989, Dec:	Discontinued TSP monitoring. Began monitoring for PM_{10} using an Andersen, Model 1200 VFC high volume sampler, collocated samplers to calculate precision.		
1993, Aug 5:	Sahara dust storm.		
1995, May 23:	Site discontinued due to school demolition.		

25	**Palm Beach International 3700 Belvedere Road West Palm Beach, Florida**	**Lat 26.690700 Lon –80.098500**	**NO2, CO, Meteorology 1986-01, Lead, Susp.part 1988-95**

Discontinued Meteorology 1997

1986:	Equipment relocated from Site 1 at Water Treatment Plant
1987, Apr 2:	Replace CO monitor with new Teco Model 48
1988, Aug:	Began Total Suspended Particulate monitoring.
1990, Oct:	Replaced TSP monitor with Andersen, Model 1200 to monitor PM_{10}. Particulate monitoring moved to platform located east of the continuous monitoring trailer.
1990, Dec 19:	Began monitoring PM_{10} continuously using an Andersen Beta Attenuation Monitor. This data is used to calculate the daily Air Quality Index.
1991, Feb 4:	Changed PM10 (BAM) analyzer and DAS to 300ug = 10V range
1991, Sep 17:	Replaced wind speed and direction monitor, Texas Electronics, Model 446A with Texas Electronics, Model R2 Series. Hedge to north of trailer was cut back.
1992, Jan 30:	Changed Beta Attenuation Monitor board back to 4.8
1992, Mar 17:	Installed version 4.11 chip in Beta Attenuation Monitor
1992, Nov 7:	Installed new Teco 111 S/N 111-34507-248
1992, Oct:	Began monitoring lead using hi vol monitor.
1993, July 26	Replaced NO2 monitor ML8840 with ML9841
1993, Aug 5:	Sahara dust storm.
1995, Feb 13:	Replaced TECO 48 S/N 48-21144-195 with TECO 48 S/N 48-17145-168
1995 June 26:	Replaced Hayes 300 baud Modem with Hayes 14.4 at 2400 baud.
1995 Oct 19:	Replaced TECO 48 S/N 48-17145-168 with ML 9830 S/N 395.
1995 Oct 31:	Took metro recorders out of service.
1995 Dec 11:	Shut down site to replace mobile lab trailer.
1996, Jan 1	Lead sampling discontinued.
1996 Jan 5	Site reactivated for data collection.
1996, May 20	AC repaired (main fuse blown).
1996, July 14	ML 9841 sn 455 malfunctioned.
1996, Aug 20	Installed repaired ML 9841 SN 455.
1997, Mar 31	Beta pump not working. Reset Beta twice.
1997, Apr 14	TECO III Zero Air cooling fan bearing shot.
1997, June 6	Replaced defective valves in CO analyzer ML 9830 S/N 395.
1997, June 16	Problem with "stack" wind speed cups. Loosened and retightened.
1997, June 19-21	Sahara dust collected.
1997, July 31	Discontinued meteorology monitoring.
1997, Aug 25	EMC data system installed and initialized.
1997, Sept 14	Modem was hung up.
1997, Dec 3	Installed Molytek recorder 2833 S/N 794171.
1999, Feb 4	Took Teco 48 S# 48-35084-249 out of service.
1999, Feb 5	Put ML 9830 S# 3023-547 in service.
1999, May 5	Converting Beta PM10 to PM2.5
1999, June 28	UPS died.
1999, July 23	Replacing Teco Calibrator S# 146t-52012-297 with Teco 146C S# 146c-61815-333.
1999, Nov 5	A/C froze up, repaired. Problems with new zero air unit.
2000, Aug 2	Installed Handar WSP/WDR
2001, June 1	Replaced Molycon on ML 9841A S#2619; A/C repaired after freeze up
2001, Sep 4	Installed UV Sensor
2001, Sep 13	NO cylinder returned a week late
2001, Nov 7	Installed EMC S# 1042 data logger
2002, July 2	Lightning Strike. All analyzers, samplers, and data loggers fried.
2002, July 9	Rewired site. Installed ML 9841A S# 2619, ML 9830 S# 2149
2002, July 12	Connected UV to data logger. WS/WD connected
2002, July 22	Installed Beta S# 0118
2002, Aug 1	Took down ML 9841A for cooler failure
2002, Nov 5	Installed ML 9841A S# 2619
2002, Dec 18	New CO gas cyl received. Incorrect valve, regulator will not fit

26	**P.G.A.**	**2969073N**	**Susp. Part.**
	3188 P.G.A. Blvd.	**0591000E**	**1986-97**
	Palm Beach Gardens, Florida		**discontinued 1998**
1986:	Began monitoring for Total Suspended Particulates		
1990 Feb:	Replaced TSP monitor with Andersen, Model 1200 to monitor PM_{10}.		
1996, Sept 6	Completed relocation of sampler from Facilities Management to roof of N. County Cthse.		
1997, June 21	Sahara dust collected.		

27B	**Delray Beach Lab.**	**Lat 26.455700**	**Susp. Part.**
	225 S. Congress Ave.	**Lon –80.093100**	**1987-2001**
	Delray Beach, Florida		
1987:	Began monitoring for Total Suspended Particulates, collocated samplers to calculate precision.		
1989, Dec:	Began monitoring for PM_{10} using an Andersen, Model 1200 VFC high volume sampler.		
1990, Oct:	Discontinued TSP.		
1993, Aug 5:	Sahara dust storm.		
1995 Aug 1:	PM_{10} sampler taken down in preparation for storm Erin.		
1995 Aug 7:	PM_{10} sampler replaced after storm Erin.		
1997, June 21	Sahara dust collected.		
2000, Jan 10	Commenced monitoring VOCs by TO-14canister method.		
2000, Nov 20	Shut down TO-14 VOC monitoring.		
2001, June 5	Shut down site for move from 345 S. Congress to 225 S. Congress.		
2001, July 1	Reactivated site at 225 S. Congress for PM monitoring.		
2002, Nov 4	Commenced monitoring for carbonyls by method TO-11A. Commenced sampling for VOCs by TO-15 canister method.		

28	**Palm Beach County Public**	**Lat 26.7757000**	**SO2**
	Health Unit Warehouse	**Lon –80.070200**	**1989 -2001**
	1050 15th Street West		
	Riviera Beach, Florida		
1988, May 12:	Relocated SO2 monitoring from Site 22		
1991, Feb 14:	Placed portable heater in shelter		
1991, Nov 8:	Installed new zero air system S/N 111-34901-249		
1992, Feb 20:	Installed new calibrator S/N 146t-36529-253		
1993, Mar 15:	High wind broke sample line loose from external holding shaft. Sample port ineffective due to high wind gusts.		
1993, Mar 16:	Contained dangling PVC sampling line on the roof		
1993. Sep 3:	Installed new spike bar and telephone surge protection		
1993, Oct 18:	Replaced SO2 Analyzer ML 8850 S/N with ML 9850 S/N 773		
1995, Jan 10:	Installed ML 9850 S/N 773 after repair.		
1995, June 26:	Replaced Hayes 300 baud Modem with Hayes 14.4 at 2400 baud.		
1995, Dec 15:	Installed new UPS.		
1997, June 19	Span off scale (6/18) due to power failure and zero air compressor not connected to UPS. Remedied by connecting compressor to UPS.		
1997, July 9	Due to power surge when air compressor turns on, analyzer reads as power failure. Reconnected compressor to wall outlet to avoid damaging analyzer.		
1997, Aug 27	Installed and initiated EMC data system.		
1997, Sept 26	Molytek recorder taken out of service per QA letter to DEP.		
2002, Oct 8	Installed Molytek 2831z		

29	**North Water Plant**	**Lat 26.4634000**	**03, Meteorology**

	202 NW 1st Avenue	**Lon –80.067800**	**1989 - 2001**
	Delray Beach, Florida		

1989, Aug 21:	The ozone monitoring, wind speed and wind direction equipment was relocated from Site 16 in WMD to Site 29 in Delray Beach.
1991, Sep 27:	Replace wind speed and direction monitor, Texas Electronics, Model 446A with Texas Electronics, Model R2 Series.
1991, Oct 21-30:	Shut down due to loss of electric service
1993, Mar 18:	Raised AC temp to control moisture
1993, Aug 3:	Modem and ETC malfunctioned after lightning strike. Replaced modem
1993, Aug 17:	Installed surge protector
1993, Sep 3:	Install new spike bar and telephone surge protector
1993, Dec 21:	Barometric pressure too low to run points
1995, Jan 6:	Shut down site due to parking lot construction.
1995, Feb 28:	Electricity turned back on. Installed ML 9812 analyzer.
1995, June 26:	Replaced Hayes 300 baud Modem with Hayes 14.4 at 2400 baud.
1995, July 11:	Installed variable voltage transformer in effort to correct strip chart aberration.
1995, July 24:	Installed new UPS.
1995, Nov 1:	Took metro recorders out of service.
1996, Aug 5	New AC installed.
1997, Aug 26	Installed and initiated EMC data system.
1998, Mar 4	Installed floppy drive in ozone monitor ML 9812 S/N 1727.
1998, July 15	A/C failed.
1998, Sept 16	Ozone analyzer locked up-problem with floppy drive.
1999, Dec 22	Installed new EMC 7.5 software upgrade.

30	**Everglades Memorial Hospital**	**0296750N**	**Susp. part**
	200 S. Barfield Highway	**0533700E**	**1989 -1992**
	Pahokee, Florida		**Discontinued 1993**

1989, Dec:	Began monitoring for PM_{10} using an Andersen, Model 1200 VFC high volume sampler.
1993,	Discontinued site.

31	**Belle Glade Health Dept.**	**Lat 26.725000**	**Susp. part.**
	US 98 & US 441	**Lon –80.667100**	**continuous**
	Belle Glade, Florida		**1990 - 1994**
			Discontinued 1994
			Reactivated 1995
			1995-2001

1990, Dec:	Began monitoring PM_{10} continuously using an Andersen Beta Attenuation Monitor
1994, Aug 22:	Discontinued site.
1995, May 27:	Primary and duplicate PM_{10}s set up after relocation from site 24. Site reactivated.
1995, Aug 1:	Primary and duplicate PM_{10}s taken down in preparation for storm Erin.
1995, Aug 7:	Primary and duplicate PM_{10}s replaced after storm Erin.
1996, Apr 15	Heavy construction occurring on east side of building and north of site with blowing wind.
1996, June 26	Building construction at jail (building to north) creating airborne particulate matter.
1996, Sept 24	Roof tar applied to Health Dept. roof.
1997, June 21	Sahara dust collected.
2001, July 1	Monitoring and reporting $PM_{2.5}$
2002, Nov	Commenced monitoring for carbonyls by method TO-11A.

32	**Iron Horse** **Jog Road & Beeline Highway** **West Palm Beach, Florida**	**Lead** **6 day manual** **1992 - 1999** **Discontinued 2000**

1992, Apr:	Began monitoring lead using hi vol monitor.
2000, Feb	Discontinued

33	**Cross County Mall** **4356 Okeechobee Blvd.** **West Palm Beach, FL**	**CO** **continuous** **1993 - 1997** **Discontinued 1997**

1993, Jul 16:	Began monitoring CO using Teco Model 48. Okeechobee Blvd is under construction.
1993, Sep:	Install new spike bar & phone line protector
1993, Nov 19:	Okeechobee Blvd (southside) near trailer is now open.
1995, June 26:	Replaced Hayes 300 baud Modem with Hayes 14.4 Modem at 2400 baud.
1995, Sep 11:	Installed new ETC 6002 S/N 194.
1995, Dec 14:	Installed UPS.
1996, Oct 18	Car struck trailer. Power disconnected. All equipment down.
1996, Oct 31	Power restored, equipment returned on line.
1997, June 12	Site discontinued due to eviction by property management.

34	**Palm Beach CO** **50 South Military Trail** **West Palm Beach, FL**	**Lat 26.674.887** **Lon –80.111853**	**CO** **continuous** **1997 -1999** **Discontinued 2000**

1997, Nov 25	Began monitoring CO using TECO Model 48.
1998, Mar 12	Installed floppy drive in carbon monoxide monitor.
2000, Oct 26	Site shutdown

35	**Royal Palm Beach WWTP** **980 Crestwood Blvd N.** **Royal Palm Beach, FL**	**Lat 26.729349** **Lon –80.232901**	**O3, PM2.5** **continuous** **1999 - 2002**

1999, Nov 15	Began monitoring for O3.
2000, Feb 1	Analyzer down because of A/C malfunction.
2000, Feb 16	Back on line.
2000, July 3	Analyzer flooded, out of service.
2000, July 6	ML9812 S/N 1727 in service.
2000, Nov 20	Analyzer shut down because of A/C malfunction
2000, Dec 4	Analyzer on line, A/C running
2001, Sep 4	Site down for new trailer
2001, Oct 12	New trailer on site, calb T.I.N. and EMC
2001, Oct 15	Calibrated ML9812 S# 2746-226
2001, Oct 26	Site operating except for wsp/wdr
2002, Jan 1	ML 9812 malfunction
2002, Jan 11	Installed ML 9812 S# 1727
2002, Feb 21	Cal TECO 49C S# 49c-67037-354
2002, Apr 1	Trailer vandalized, PC stolen.
2002, Apr 3	Site log recreated due to vandalism
2002, Apr 25	Installed PC after vandalism